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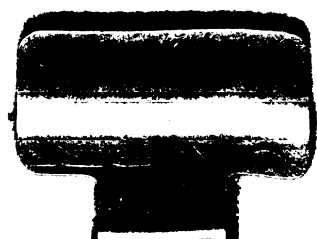
REPORTS AND COMMUNICATIONS

VOLUME XVII.



CITY OF BOSTON
PRINTING DEPARTMENT

1922



THE FINANCE COMMISSION

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PART I.

REPORT TO THE GENERAL COURT.

Boston, January 31, 1922.

*To the Honorable the Senate and House of Representatives
in General Court Assembled:*

In accordance with section 18 of chapter 486 of the Acts of 1909, the finance commission submits herewith its annual report for the year 1921-22.

I. ORGANIZATION OF THE COMMISSION.

There has been no change in the personnel of the commission this year, John F. Moors, whose term expired, having been reappointed by the governor.

Increases in salary have been granted during the year to the staff of the commission as follows:

Consulting engineer	\$1,000 a year.
Counsel	500 a year.
Investigator	300 a year.
Stenographer	200 a year.
Stenographer	200 a year.

II. APPROPRIATIONS AND EXPENDITURES.

The commission petitioned the legislature for an increase in its statutory appropriation from \$30,000 to \$40,000, on account of the increase in prices of materials, in rent, and in charges for service, and was granted the amount requested. As stated in last year's report, an additional appropriation was granted the commission by the city government of Boston in the sum of \$9,000, for the purpose of making a study of pension systems, with the aim of pensioning on a contributory basis all city of Boston and county of Suffolk employees. This additional appropriation did not become available until January 25, 1921, and therefore no account of the same was rendered in last year's report.

The expenditures of the commission during the year were as follows:

Total regular net appropriation	\$40,000 00	
Expenditures:		
Salaries, permanent employees	\$23,305 00	
Salaries, temporary employees	1,215 00	
Printing and binding	2,362 35	
Postage	30 72	
Express charges	20 25	
Light	72 98	
Rent	5,422 08	
Communication	310 07	
Cleaning	44 00	
Experts' services	1,006 20	
Fees, service of venires, etc.	45 28	
Blueprinting	11 25	
General plant	48 15	
Furniture and fittings	58 05	
Office equipment	100 00	
Library equipment	110 79	
Office supplies	245 02	
Ice	24 00	
Special investigations	1,426 29	
		35,857 48
Balance		<u>\$4,142 52</u>

The expenditures under the special appropriation for pension investigation were as follows:

Total net appropriation	\$9,000 00	
Expenditures:		
Salaries	\$475 31	
Experts' services	937 67	
Express charges	7 24	
Communication	5 39	
Printing	114 25	
		1,539 86
Balance		<u>\$7,460 14</u>

III. THE WORK OF THE COMMISSION.

During the year the commission has held 40 meetings; there have been 79 hearings, and 103 witnesses have been examined in various investigations and matters affecting the interests of the City of Boston.

All the members of the Finance Commission except the chairman serve without pay. The meetings of the commission have been attended by every member, except in cases where sickness or other imperative reasons have prevented some members from attending.

The commission has issued 44 reports and communications, of which 20 were published and 24 unpublished.

The published reports were as follows:

- Feb. 21, 1921. The Mayor. In regard to the action of the School Committee in making increases in salary of its teaching force, in accordance with a different schedule from that used in obtaining legislation for salary increases.
- March 11, 1921. The Mayor. In regard to proposed abolition of Licensing Board by House Bill 807.
- April 18, 1921. The Committee on Metropolitan Affairs. In regard to proposed teaming tunnel between Boston and East Boston.
- April 21, 1921. The Committee on Social Welfare. In regard to proposed pension bill for employees of the City of Boston and County of Suffolk.
- April 25, 1921. The Mayor. In regard to firm of accountants employed to audit the accounts of the Treasury Department of the city.
- April 26, 1921. The Mayor. Regarding payment of bills incurred in excess of appropriations for the fiscal year.
- May 3, 1921. The Mayor. Second report on payment of bills incurred in excess of appropriations for the fiscal year.
- May 27, 1921. The Mayor and City Council. Third report on payment of bills incurred in excess of appropriations for the fiscal year.
- June 3, 1921. The Mayor. Regarding specifications for crushed stone in use by the Supply Department.
- June 4, 1921. The Mayor. Regarding the award of contracts for the hire of teams.
- June 6, 1921. The Mayor. Regarding advertising in newspapers other than the *City Record* by the Schoolhouse Commission, in violation of section 29 of chapter 486 of the Acts of 1909.

- June 8, 1921. The Mayor. Regarding work done under contract of W. A. Snow Iron Works for building iron fence around ball field on Boston Common.
- June 28, 1921. The Mayor. Regarding the opening of streets by public service corporations and the restoration of the same.
- June 29, 1921. The Mayor. Regarding passenger motor service for city departments.
- July 29, 1921. The Mayor. Regarding the annual reports of city departments and the abolition of the Statistics Department.
- Sept. 23, 1921. The City Council. Regarding proposed additional loan of \$200,000 for highways, making of.
- Oct. 7, 1921. The Mayor. Regarding proposed widening of Washington street between Harvard place and Ordway place.
- Dec. 17, 1921. The Mayor and City Council. Regarding the present accounting system of the city.
- Dec. 22, 1921. The Mayor. Second report on the present accounting system of the city.
- Dec. 29, 1921. The Mayor. Opposing passage of new ordinance creating additional position of deputy sealer in Weights and Measures Department.

The unpublished reports were as follows:

- Feb. 21, 1921. The Mayor. In regard to insuring buildings of West Department of the City Hospital, now leased to the Federal Government.
- March 2, 1921. The Committee on Legal Affairs. Favoring passage of House Bill 842, providing for licensing and regulating of animal-drawn vehicles.
- March 2, 1921. The Committee on Cities. Opposing passage of Senate Bill 30, providing for the payment of a sum of money to Olive P. Gately.
- March 5, 1921. The Mayor. Transmitting report of the consulting engineer on specifications for crushed stone in use by the city.
- March 21, 1921. The Mayor. Transmitting report of consulting engineer in regard to specifications for bituminous materials for road construction.
- March 29, 1921. The Mayor. Regarding his acceptance of chapter 109, General Acts of 1916, providing for the appointment of paid interpreters in the Municipal Court of Boston.
- March 31, 1921. The Mayor. Regarding privileges allowed John J. Connorton of the Hospital Department and the inadvisability of granting such privileges to employees.
- April 6, 1921. The Mayor. Regarding payment of a sum of money to Thomas F. Goode.

- April 15, 1921. The Mayor. Regarding proposed payment of a pension to George A. Betters.
- April 15, 1921. The Mayor. Regarding bills of chemical examiners for the Northern District Medical Examiner.
- April 18, 1921. The Mayor. Regarding proposed payment of a pension to William S. Foster.
- May 5, 1921. The Mayor. Regarding the proposition of the Equitable Life Assurance Society of the United States to underwrite the retirement system for city and county employees.
- May 5, 1921. The Mayor. Regarding the occupation, rent free, of rooms at the Dover Street Bath House by a city employee.
- May 20, 1921. The House Committee on Ways and Means. Regarding Senate Bill 331, providing for rebuilding four bridges over the Charles river.
- July 7, 1921. The Mayor. Regarding award of contract for installing electric, gas and air systems in the new Public Latin School.
- July 13, 1921. The Mayor. Regarding the award of the contract for erecting and completing certain portions of an elementary school-house in the Samuel Adams District to other than the lowest bidder.
- July 22, 1921. The Mayor. Regarding the sale of the ferryboats "D. D. Kelly" and "General Hancock."
- July 25, 1921. The Mayor. Second report on the sale of the ferryboats "D. D. Kelly" and "General Hancock."
- Oct. 5, 1921. The Fire Commissioner. Regarding the proposed conversion of a submarine chaser into a fireboat.
- Oct. 7, 1921. The City Council. Regarding loan orders for highways, making of; the methods employed by the Street Commissioners, and the proposed widening of Washington street between Harvard place and Ordway place.
- Oct. 21, 1921. The City Council. Regarding the request of the City Council for a report on unemployment.
- Oct. 27, 1921. The City Council. Regarding the lease of the refectory building at Franklin Park and the headhouse, South Boston, by the Woman's Educational and Industrial Union.
- Dec. 14, 1921. The Mayor. Opposing the acceptance of chapter 414 of the Acts of 1921, providing for the payment of a sum of money to Olive P. Gately.
- Jan. 31, 1922. The General Court. Regarding the present accounting system of the city and proposed improvements therein.

Two subjects absorbed much of the attention of the commission during the present year, viz., the study of a uniform contributory pension system for the employees

of the city of Boston and county of Suffolk, and an investigation of the accounting system in use in the city and its effect upon the city's finances.

Later in this report a brief statement of the work of the commission on pensions for city of Boston employees will be found under "Recommendations for Legislative Action."

ACCOUNTING METHODS IN USE IN THE CITY.

In his annual address to the city council on February 7, 1921, the mayor stated that the departments of the city had closed their annual accounts with a balance of \$370,808, which, together with other items, made a "total surplus" of \$3,817,250.61. This statement was later challenged by the finance commission, when it was ascertained from the department heads that over \$1,800,000 in unpaid accounts were outstanding at the close of the fiscal year. The published records of the city auditor, however, showed that actual balances of unexpended appropriations were returned to the departments.

The finance commission reported these facts to the mayor. The mayor resented the action of the commission, and endeavored to defend the system of city auditing, but did not deny the fact that the city owed a large undisclosed debt at the end of the fiscal year. The commission thereafter employed the accounting firm of Patterson, Teele and Dennis to examine the system of accounting in use by the auditor. The findings of these accountants confirmed the report of the finance commission.

A further examination of the system disclosed a practice that had been followed since 1892, by which bills in excess of the appropriations for a fiscal year could be passed on to the next fiscal year and paid in that year before the appropriations were made, under a construction given to chapter 320 of 1889 by the city auditor. This merging of fiscal years was not apparent from the auditor's records.

Upon request from the Finance Commission for an opinion of the corporation counsel as to the legality of the construction placed upon the statute of 1889 by the auditor, he replied in effect that the statute was improperly construed and did not authorize the city treasurer to pay the bills of one fiscal year from funds to be charged to a succeeding fiscal year.

The city auditor resigned on December 31, 1921. Since early in January the finance commission has had the firm of Patterson, Teele and Dennis procuring such information from the auditor's office as was possible, in order to ascertain as nearly as may be the exact amount of the indebtedness that has accumulated because of this merging of fiscal years.

The finance commission caused a bill to be filed in the legislature to provide a legal way to raise the necessary funds to discharge this indebtedness. It has also filed a bill to provide a different system of accounting than that now in use.

CITY OWNED AUTOMOBILES.

The present system of providing transportation for city officials with city-owned automobiles is both inefficient and extravagant.

The practices of restricting the use of automobiles of any department to the work of that department, whether it be great or small, is extravagant unless the automobiles are constantly in use. Very few of the city-owned automobiles are used for city business during all the working hours of a day. They are not in constant use. Except for a few departments that require the service of a small runabout type of car, city officials and employees who require automobile transportation would be best served by a taxicab system.

City departments that do not have city-owned automobiles have occasional uses for them. They cannot be served, however, by a city-owned automobile of another department, even though half a dozen are standing idle. There is no inter-departmental service respecting auto-

mobiles. Under a taxicab system every city official and employee who required to be transported by motor would have that privilege at any time with promptness and at a minimum of expense to the city of Boston.

If the city is to continue to own a fleet of seventy-odd automobiles, then some method should be devised whereby not more than three different types of car should be purchased. At the present time the city-owned automobiles are of almost every known type and make. Provision for repairing city-owned automobiles at wholesale prices and under city direction should be made. There should also be devised a system under which city-owned automobiles would be housed in one or two places and not all over the city, as is now being done. The place where a city-owned automobile is housed now is determined by the place where the official or employee lives who uses it. Or, if he has a city chauffeur, as some of the officials do, then the city pays rent to a garage nearby the residence of the chauffeur. In addition to the rent of these garages, which is at retail rates, much of the gasoline and oil that the city requires is purchased at these garages. There are also very large repair bills incurred.

If the mayor believes that the city should continue to own automobiles, then some step should be taken at once to provide for less extravagant use, maintenance and housing of city cars.

ATTEMPT TO OBTAIN RELIEF BY LEGISLATION AFTER FAILURE IN THE COURTS.

For the past few years an attempt has been made almost annually by a citizen of Boston to have the general court relieve her from an alleged loss which she claims to have suffered because she settled a case that she had in litigation before the court of last resort was reached, and now believes that she got the worst of the bargain. This is the case:

In July, 1909, Mrs. Mary M. Gately, as guardian of her two children, Grant and Olive P. Gately, brought

suit in the Superior Court against the city of Boston to recover damages for breach of a contract and for rent, both of which claims concerned the land and wharf located at 468-484 Albany street, Boston. The case was referred to an auditor, who found in favor of Mrs. Gately. Subsequently the case was tried before a jury, which also found for Mrs. Gately on one branch of the case in the sum of \$17,800, and on the other branch of the case in the sum of \$15,000. The judge who heard the case with the jury ruled that the city was not legally liable for the finding of \$15,000, and the verdict as to that amount was set aside. Both parties filed exceptions in the Supreme Judicial Court, and just before the case was reached in that court for argument a settlement was reached by the parties, the city paying to Mrs. Gately the sum of \$23,000.

This settlement was agreed to by Mrs. Gately as guardian of her children and by William H. Irish, who had been appointed guardian *ad litem* for the children, by Edmund A. Whitman representing the plaintiff, Mrs. Gately, and by the assistant corporation counsel of the city of Boston. This agreement of all parties was in writing and was confirmed by the court on January 13, 1913.

In 1914 and again in 1915 Mrs. Gately presented a petition to the legislature, seeking to set aside this settlement and to have the city of Boston pay her the \$15,000 which the judge of the Superior Court had ruled could not be legally paid by the city. In both years the bill failed of passage.

In 1916 she filed a similar bill to accomplish the same purpose. It passed both branches of the legislature and became a law without the governor's signature, but required by its terms the approval of the mayor and city council before the January 31 following. The council failing to approve within that time, the act became ineffective.

In 1921 the same petition was again filed by Mrs. Gately. It passed the legislature and received the

approval of the governor. By its terms approval of the mayor and city council was required. The city council approved it, but the mayor vetoed it. The following statement in the mayor's veto message indicates the effect of encouraging such appeals to the legislature by those who either do not want to use the courts to settle their litigation, or are unwilling to stand by their own settlements:

If a compromise so made is to be set aside in pursuance of a special enactment, the force of all compromise settlements made by the city will be greatly weakened and an attempt to reopen numerous other cases may reasonably be anticipated. A dangerous precedent, moreover, will be created as regards action in future cases, and the ability of the law department to make compromise settlements with claimants against the city, with the confidence that once made they will not be disturbed, will be seriously impaired. In my judgment this will be not only a great disadvantage to the city but perhaps an even greater disadvantage to persons having valid claims against the city.

STREET LAYING-OUT DEPARTMENT.

The custom of appropriating money for building streets and highways, and of allowing the street commissioners to expend such appropriations as are made in the construction of such highways as they may designate after the appropriation is made, should be discontinued.

In April, 1921, the street commissioners were provided with an appropriation of \$800,000 from a loan. The mayor was furnished with a list of the streets that were selected to be built from this appropriation. In August the street commissioners requested a further appropriation of \$200,000 and furnished the mayor with another list of streets that they proposed to construct with this appropriation. The finance commission investigated the matter of the earlier appropriation of \$800,000 and found that less than \$1,000 of it was spent upon the streets designated by the street commissioners

in April as those upon which the money was to be expended. It appeared that this \$800,000 appropriation from a loan in April was almost entirely used for completing street construction projects of former years. When the additional appropriation of \$200,000 from a loan was requested in August, another and different list of streets was furnished than those designated in April, although nothing had been done upon any of the streets in the April list.

Appropriations for this work should not be made without an accurate statement from the street commissioners as to what streets the money is to be used upon and as to whether it is to be used to complete a programme of street construction already started or to initiate new construction. After the appropriation is made there should be no change in the streets to be built.

Appropriations for street construction are used by two departments, the street laying-out department and the public works department. Much confusion arises from the methods of accounting in these departments in the division of these funds. Each of these departments should have a carefully devised system of accounting.

TRAFFIC TUNNEL BETWEEN BOSTON AND EAST BOSTON.

This is a matter that has been reported upon several times by various investigating boards. An additional report on the matter was submitted to the legislature of 1921 by a joint board comprising the division of waterways and public lands of the department of public works of the commonwealth and the transit department of the city of Boston. This investigation was originally authorized by chapter 51 of the Resolves of 1919. Further time for investigation and report was secured by chapter 73 of the Resolves of 1920.

The report submitted, although it did not specifically recommend the construction of a tunnel, contains in certain portions such language as fairly to warrant the

inference that the boards favored the construction of the tunnel substantially as indicated in their report.

The finance commission has always adhered to the principle that no additional means of communication to East Boston involving large expenditures of money should be authorized unless it contemplated the discontinuance of the ferry service.

As regards the details of the plan of the joint board, the finance commission believes the figures representing the financial matters are based upon incorrect and unwarranted assumptions; that the estimates of traffic through the tunnel are unwarranted; that the proposed construction would be so faulty as to be practically prohibitive for all classes of traffic except pleasure automobiles, and that the danger of accidents on account of imperfect ventilation and from fires had not been given such consideration as their importance warranted.

The finance commission, after a careful examination of this report, is of the opinion that the plan as outlined would not improve the transportation service to and from East Boston to a degree commensurate with the great expense involved, and that it would not make possible the discontinuance of the present ferry service.

The bill was referred by the committee on metropolitan affairs to the next general court.

The detailed recommendations of the finance commission are contained in a report on the proposed traffic tunnel to East Boston to the committee on metropolitan affairs, under date of April 18, 1921.

SPECIFICATIONS FOR CITY WORK.

On several occasions during the year the finance commission has had occasion to criticise specifications in use by departments of the city as not being suitable for securing proper quality as regards supplies, or suitable workmanship under contracts.

As regards the method of purchasing crushed stone by the city, involving an expenditure of between one and two hundred thousand dollars annually, the finance commis-

sion recommended changes in existing specifications, so that the officials having actual charge of the department using the stone would be the judges of its quality rather than the superintendent of supplies, and also that modern, scientific methods be adopted for determining the suitability of the stone for the work to which it was to be applied.

Two reports were submitted to his honor the mayor, but the most important recommendation contained in them was not adopted. As a result a large part of the stone furnished to the city, particularly for street construction, was not the best quality for the work.

Again, as regards the purchase of bituminous materials, the finance commission in a report dated March 21, 1921, pointed out the inconsistencies in the specifications for bituminous road materials, some materials being bought at a per ton rate and others at a per gallon rate. The recommendation of the finance commission was that a common standard for purchase of all such materials be adopted. Although the wisdom of this recommendation was not disputed, the necessary changes to conform with the recommendation were not made.

REPAIR OF STREET OPENINGS.

From time to time during the past year complaints have been brought to the finance commission by individuals and organizations that the city authorities were lax in securing proper repairs on streets that had been opened by individuals or public service corporations for the repair or construction of underground works.

Written communications with some of the higher executive officials at City Hall were submitted to the finance commission. The statements made in these letters indicated that some of the higher executive officials were not fully acquainted with the powers and duties of the city touching these matters under existing statutes. The finance commission, after a study of the matter, particularly as regards the provisions of chapter 553 of the Acts of 1910, issued a report showing that

the city officials had ample authority under existing law to secure satisfactory results as regards the repair of street openings. The result of this report has been to secure more efficient inspection and better work as regards restoration of payments displaced for the purposes above outlined.

DELAY IN ISSUING ANNUAL REPORTS.

The Revised City Ordinances, chapter 3, section 24, provides that the heads of departments shall send to the mayor within thirty days after the close of the financial year a report containing a statement of the receipts and expenditures of the departments and things done in the departments during the year.

If these reports are to be of any value they should be issued promptly and confined to the matter set out in the ordinance, which should be stated in a clear and intelligent way.

The reports are issued so late in the year that they are of no value to the mayor and of little interest to anyone else. When finally issued, they contain so many tables and details that the reader is discouraged at the outset.

On July 15, 1921, almost six months after the close of the last financial year, nineteen departments had not made their reports at all, and one department had just sent in its report of the year before last, seventeen months late.

It costs more than \$42,000 a year to print these reports. The delay in issuing these reports renders this sum practically a waste. There appears to be no good reason why a department should not issue its report within the time called for in the ordinance.

RECOMMENDATIONS FOR LEGISLATIVE ACTION.

I. *Pensions for City of Boston Employees.*

The finance commission has made a study of public pension systems and recommends the enactment of

legislation establishing a uniform contributory retirement system for employees of the city of Boston and county of Suffolk.

There are at the present time in the city of Boston ten classes of public employees who receive the benefits of a non-contributory pension system. These classes are firemen, policemen, laborers, school janitors and attendance officers, school teachers, judges, court and probation officers, and veterans of past wars. The only public employees who are excluded from pension benefits are the clerical, engineering, investigative and inspection forces of the city.

The total number of public employees is approximately 16,256, and of this number only 6,345, approximately, do not share in a public pension system. The experience of the city of Boston in the establishment of a non-contributory pension system by individual units is not uncommon. City employees petition the legislature at each annual session for the passage of special individual pension acts. These acts have become quite numerous in the last decade. Such a practice, if continued, will build up a further class of pensioners supported from the public treasury without any contribution on their part.

Pension systems have been investigated by actuaries in various parts of the country and only when established on the contributory basis have they been pronounced sound.

A pension system for public employees is justified for reasons of economy and efficiency.

The finance commission made an investigation in 1920 of the number of employees who had served the city or county ten years or more and found that more than one half had given a decade or more of service to the city, ranging from ten to sixty-three years, the greater number having given at least fourteen years of service.

The commission found that there were at least 1,175 persons in the city's service who were more than sixty

years of age and that the efficiency of the service was greatly retarded by this group. The superannuated employee slows down the work of a department and prevents the younger and more efficient employees from advancement. Promotions are necessarily retarded while the aged fill the upper grade positions. Not only is the efficient service of a department lowered, but it is often found necessary to increase the number of employees in order to perform the work which the superannuated employee is unable to perform. These are the two leading motives which have urged public authorities to establish a pension system for public employees.

It cannot be advocated with any fairness that only teachers, policemen, firemen, laborers and court officials should receive the benefits of a non-contributory pension and the remainder of the city employees be denied participation in any pension system.

The commission recommends that legislation be enacted providing for the establishment of a uniform contributory retirement system for the employees of the city of Boston and county of Suffolk.

II. Appointment of the Schoolhouse Commission by the School Committee.

The schoolhouse department is administered by three commissioners, appointed by the mayor for a term of three years. The appropriations for the schoolhouse department are made by the school committee. The schoolhouse department uses the money appropriated for it by the school committee to build such schoolhouses as the school committee orders and to make such repairs on existing buildings as are necessary. The school committee, however, has no control over repairs or new structures once the appropriation for the year is made. It cannot speed up or change the work or even require a report of progress.

The people regard the school committee as responsible

not only for the education of their children but for the proper housing of them, inasmuch as the school committee appropriates all the funds for both purposes. Yet, once the annual appropriation bill is passed, the school committee is helpless in remedying school housing conditions, whether in the matter of repair or of new structures. Even when making the appropriation for the year the school committee has no power to secure speedier construction of school buildings, but is compelled to wait until the schoolhouse commission acts. This division of responsibility between two departments of the city retards the educational opportunities of the public school children.

The finance commission believes that if the school committee were given the power to appoint the schoolhouse commission, subject to the approval of the civil service commission as in the case of the mayor's appointments of heads of departments, the problem of schoolhouse shortage in Boston would be more rapidly solved.

The finance commission recommends the enactment of legislation which will provide for the appointment of the schoolhouse commissioners by the school committee, subject to the approval of the civil service commission, as provided in sections 9 and 10 of chapter 486 of the Acts of 1909.

Mr. Moors of the commission is not prepared to recommend this legislation.

III. Discontinuance of the Annual Publication of the Pay Roll Book of City Employees.

In 1888 the city of Boston published a list of employees, giving name, birthplace, residence, salary and date of appointment. From 1888 to 1905 no pay roll book was published, with the exception of a small pamphlet issued in 1894. This second list, however, did not include all city employees. In 1905 the city began to publish annually a complete list of the employees of the city of Boston and county of Suffolk. Approximately 1,000

copies of the list are published each year. The cost of this publication had increased from year to year. The 1921 issue cost \$5,308.50, or \$5.30 a copy. This list is distributed free by the city. It is practically exhausted a few days after its appearance. The greatest demand is from city employees.

In the year 1910 the commonwealth began the practice of publishing an annual list of its employees, but afterwards discontinued the publication and adopted the policy of requiring an annual return of each department of the number of employees. The list is published only in alternate years.

There are approximately 27,000 employees in the state departments and 1,000 copies of the last volume were issued. The cost of these thousand copies was \$1,168.73, approximately one fifth of the cost of the Boston list.

The finance commission believes that all the benefits of a publication of this kind in the city of Boston will be secured by publishing the list every two years, and recommends that the law be changed to provide for the preparation of the municipal list each year and for its publication in the second and fourth years only of each mayor's term. In the years in which the list is not published it should be kept in the auditor's office, open to public inspection.

The finance commission has in its office an alphabetical card file of all city and county employees, showing compensation paid them. This file is kept corrected to date. Since the adoption of the segregated budget system there is annually shown by departments the salary paid every employee. This budget is distributed to the public.

The finance commission recommends that section 1 of chapter 168 of the Special Acts of 1919 be amended by adding in the eighteenth line, after the words "pay roll" the words "and to keep a copy of said list open for public inspection," and by adding at the end of the section the words "in the year 1923 and every two years thereafter."

IV. Amendment of Chapter 320 of the Acts of 1889.

Chapter 320 of the Acts of 1889 provides that city departments may incur liabilities each year before the regular appropriations are made, not exceeding in amount one third of the appropriations for the previous year. The city treasurer is authorized to pay such liabilities from any funds in the city treasury, and if there are no funds in the city treasury, or the funds therein are insufficient, the city treasurer is authorized to borrow sufficient funds to pay such liabilities.

The obvious intent of this act is to enable the city departments to carry on the business of the city from the beginning of the fiscal year until appropriations are made, and to enable the treasurer to pay the bills during this period.

The practice, however, for the past twenty-five years at least, has been for the city treasurer to use the funds made available under this authority to pay bills carried over from the prior fiscal year. The result is that the expenditures of a fiscal year are not limited to the appropriations for that fiscal year. This practice has resulted in accumulating liabilities amounting to more than \$3,000,000.

The finance commission believes that chapter 320 of the Acts of 1889 should be amended, so as to prohibit expressly the city treasurer from paying any bills brought over from a prior fiscal year in excess of the unexpended appropriations brought over from the same fiscal year, by adding the following sentences at the end of section 1 of chapter 320 of the Acts of 1889:

Nothing in this act shall be construed to authorize the city treasurer to pay from funds made available under this act any bills, obligations or liabilities remaining unpaid at the end of the prior fiscal year which are in excess of the balance of appropriation for that fiscal year remaining unexpended. All bills, obligations and liabilities of the city of Boston not paid in the fiscal year in which they were incurred shall only be paid to the

extent of the unexpended balances of appropriations carried over from the prior fiscal year, and a special record of such payments shall be made by the city auditor and city treasurer.

so that it will read as follows:

SECTION 1. Section six of chapter two hundred and sixty-six of the acts of the year eighteen hundred and eighty-five is hereby amended by adding thereto the following: Except that at the beginning of the financial year, to meet the liabilities of the several departments incurred in the carrying on of the work entrusted to them, until the city government shall otherwise order, expenditures may be made, liabilities may be incurred and payments made from the treasury from any funds therein, and the treasurer may borrow money in anticipation of taxes to provide funds. Such expenditures and liabilities shall not exceed for each department one-third the entire amount appropriated for the department the previous year, and shall be considered and reckoned as a part of the expenditures of and the money paid therefor as a part of the appropriations for, the current financial year. Nothing in this act shall be construed to authorize the city treasurer to pay from funds made available under this act any bills, obligations or liabilities remaining unpaid at the end of the prior fiscal year which are in excess of the balance of appropriations for that fiscal year remaining unexpended. All bills, obligations and liabilities of the city of Boston not paid in the fiscal year in which they were incurred shall only be paid to the extent of the unexpended balances of appropriations carried over from the prior fiscal year, and a special record of such payments shall be made by the city auditor and city treasurer.

V. Amendment to Section 3 of Chapter 486 of the Acts of 1909, and the Repeal of Chapter 261 of the Acts of 1893.

Under the provisions of section 3 of chapter 486 of the Acts of 1909, which act contains certain amendments to the Boston city charter, it is provided that the city auditor may, with the approval in each instance of the mayor, at any time make transfers from the appropriation for current expenses for one division of a depart-

ment to the appropriation for current expenses of any other division of the same department, and from the reserve fund to any appropriation for current expenses of a department, and may also with the approval of the Mayor, at any time between December 1 and February 1, make transfers from any appropriation to any other appropriation.

After the passage of this act, the question arose as to whether or not chapter 261 of the Acts of 1893, which provided that between February 1 and December 1 of each year only the city council had authority, by a two-thirds vote, to make such transfers, had been repealed. The opinion of the corporation counsel was obtained, to the effect that chapter 261 of the Acts of 1893 had not been repealed and the action of the city council was necessary on transfers between February 1 and December 1 of every year.

In 1916 the segregated budget was adopted by ordinance. The segregated budget compels department heads to state at the beginning of the year the purposes for which the appropriations requested are to be expended. The city council thereafter appropriates by items the amounts allowed the departments by the mayor. Thereafter when the power of transfer is exercised it becomes the power to re-appropriate, and should not be granted except for very urgent reasons.

The experience of the past five years has shown that a segregated budget may be made an aid to extravagance rather than a check upon it, because of the ease with which department heads can obtain transfers from one item to another and even from one department to another. Moreover, transfers easily obtained render unnecessary any thoughtful study by department heads in the preparation of their budgets at the beginning of the year. In some departments it has become the practice at the end of the year to gather all unexpended items in the budget into one fund — so easy is it to obtain transfers — and to expend this sum for a purpose not mentioned in the segregated budget.

For example, during the last three years one department has purchased one or more automobiles each year after December 1, although these purchases had not been provided for when the budget was made up. This year one department undertook early in the year an expenditure amounting to more than \$5,000, which was purposely not provided for in the budget, and was assured by the mayor that if there were not money enough in the balances under the different items of the segregated budget of this department at the end of the year he would transfer sufficient funds from other departments to meet the liability.

There should be few transfers from one item to another of the budget before December 1 of each year, yet these transfers begin as early as May.

The finance commission recognizes that transfers may be necessary, both from the reserve fund and from item to item within a department, but unless these transfers are scrutinized carefully and department heads are required to show a necessary, urgent and unforeseen reason for each transfer, the segregated budget system as an aid to economy and efficiency not only fails but becomes an inducement to extravagance.

The finance commission believes that no city official appointed by the mayor can maintain an impartial attitude toward requests for transfers of budget items, particularly if the requests are endorsed by the mayor. The commission further believes that the chief executive of the city, who is responsible under the present charter for the appropriation and expenditure of all moneys, cannot maintain a firm and impartial attitude toward requests for transfers from his own appointees, especially during the last two months of the year.

The finance commission is authorized to investigate the departments of the city. Since the adoption of the segregated budget it has annually scrutinized with great care the departments' requests, item by item, and has rendered a written opinion each year to the mayor upon every item of the segregated budget for each department.

These reports have been an effective instrument in the hands of the mayor with which to reduce unnecessary requests for appropriations by department heads.

The data and experience thus annually gained by the commission, taken with its power of investigation, which includes authority to administer oaths and require the attendance of persons and the production of papers render it peculiarly fitted to pass upon transfers under the segregated budget system.

The finance commission believes that chapter 261 of the Acts of 1893 should be repealed, and that section 3 of chapter 486 of the Acts of 1909 should be amended, by adding in the second paragraph of said section in the second line, after the words "the mayor," the words "and the finance commission," and by adding in the fifth line, after the word "and," the words "at any time with the approval of the mayor and city council," and by adding in the eighth line, after the word "mayor," the words "and the finance commission," and by striking out in the twelfth line the word "such," and inserting in place thereof the word "the," and by adding in the thirteenth line, after the word "approval," the words "of the mayor and the finance commission," and by inserting in the thirteenth line, after the word "the," the word "estimated," so as to read as follows:

SECTION 3. All appropriations other than for school purposes to be met from taxes, revenue, or any source other than loans shall originate with the mayor, who within thirty days after the beginning of the fiscal year shall submit to the city council the annual budget of the current expenses of the city and county and may submit thereafter supplementary budgets until such time as the tax rate for the year shall have been fixed. The city council may reduce or reject any item, but without the approval of the mayor shall not increase any item in, nor the total of a budget, nor add any item thereto, nor shall it originate a budget. It shall be the duty of the city and county officials, when requested by the mayor, to submit forthwith in such detail as he may require estimates for the

next fiscal year of the expenditures of the department or office under their charge, which estimates shall be transmitted to the city council.

The city auditor may, with the approval in each instance of the mayor and the finance commission, at any time make transfers from the appropriation for current expenses of one division of a department to the appropriation for current expenses of any other division of the same department and at any time with the approval of the mayor and city council from the reserve fund to any appropriation for the current expenses of a department; and may also, with the approval of the mayor and the finance commission, at any time between December first and February first, make transfers from any appropriation to any other appropriation, *provided, however*, that no money raised by loan shall be transferred to any appropriation from income or taxes. He may also with the approval of the mayor and the finance commission apply any of the estimated income and taxes not disposed of in closing the accounts for the financial year in such manner as he may determine.

Respectfully submitted,

MICHAEL H. SULLIVAN, *Chairman,*

COURTENAY GUILD,

JOHN F. MOORS,

JAMES M. MORRISON,

J. WALDO POND,

The Finance Commission.

PART II.

OFFICIAL COMMUNICATIONS.

COMMUNICATION TO THE MAYOR
in relation to
INSURING BUILDINGS OF WEST DEPARTMENT
OF CITY HOSPITAL.

Boston, February 21, 1921.

HON. ANDREW J. PETERS, *Mayor*:

SIR,— In answer to your letter of February 16, requesting the advice of the Finance Commission on the taking out of insurance on the West Department buildings of the City Hospital, recently leased to the Federal Government, the commission reports as follows:

It is and has been for many years the policy of the City of Boston not to insure its buildings. This policy has proved economically sound.

The West Department buildings will undoubtedly be occupied while the Federal Government retains its lease by a large force of hospital employees, so that there will be constant supervision over the plant. In addition there will be watchmen on the premises to give warning in case of fire. Besides the buildings are well equipped with fire appliances. Engine 30 of the city Fire Department is located on Centre street, corner of Bellevue street, West Roxbury, within a five-minute run of the West Department buildings, and any serious fire could be handled quickly from that station.

The West Department is not the only building owned by the City of Boston and leased to outside interests. The Old State House on Washington street is owned by the city and leased to the Bostonian Society at \$100 a year. No insurance is carried on this building by the City of Boston.

The Finance Commission believes that the long

established policy of not insuring buildings of the city should be continued and that it is not necessary to depart from this policy in the case of the West Department.

Respectfully submitted,

THE FINANCE COMMISSION,
by MICHAEL H. SULLIVAN,
Chairman.

COMMUNICATION TO THE MAYOR

*in relation to*A PETITION OF THE SCHOOL COMMITTEE
TO HAVE ITS APPROPRIATING POWER
ENLARGED.

BOSTON, February 25, 1921.HON. ANDREW J. PETERS, *Mayor*:

SIR,— Last October the School Committee requested the Governor to include in his call of the special sitting of the Legislature consideration of a petition of the School Committee to have its appropriating power enlarged, for the purpose of increasing the salaries of teachers and to meet the increased cost of fuel and school supplies. The Governor referred the School Committee to Your Honor and the Finance Commission for approval of its petition.

The School Committee then requested Your Honor's approval of its petition and the matter was referred by Your Honor to the Finance Commission for investigation and report.

The School Committee submitted to the Finance Commission the facts upon which its petition for this legislation was based, and among these facts was a proposed schedule of salary increases, showing the amount of increase proposed for every person on the service of the School Committee who was to have an increase. By this schedule no teacher or other employee of the School Committee was to receive an increase greater than \$216.

This schedule of the School Committee was incorporated in the report of the Finance Commission to Your Honor, dated December 6, 1920, and later submitted to the Legislative Committee on Municipal Finance when the Finance Commission appeared in

favor of the bill. Moreover, a copy of this schedule was furnished, on request, to the Governor of the Commonwealth when the bill was before him for his approval.

After the School Committee's bill had been signed by the Governor it required the approval also of Your Honor before it became a law. This approval Your Honor gave on January 11, 1921, based on the salary schedule which had been presented to you by the School Committee through this commission in November, 1920.

On February 1, 1921, three weeks after Your Honor gave your approval to the law, the School Committee of last year at its last meeting of the year changed the salary schedule in many important respects. Increases of \$432 each were granted to one rank, \$384 each to another rank, and \$360 to still another, while 2,000 * teachers were granted increases of \$248, and all teachers in elementary grades entering the service were reduced \$96.

It is difficult, therefore, for the Finance Commission to understand the School Committee when it says, as reported in the public press, that its petition to the Legislature "contained no reference to any increase in salary of any definite amount." The petition of the School Committee to the Legislature and to Your Honor included not only the formal written petition, but every representation that it made to the Legislature and to Your Honor as the basis of its need for more funds.

The School Committee is the legal body charged with the duty of fixing the salaries of teachers and other employees of the School Department. In this instance, however, Your Honor had an absolute veto power over the additional appropriations granted the School Committee by the Legislature to increase salaries at all. Your Honor, therefore, could have refused to approve the legislative act on January 11, had you known that the salary schedule was to be different from the one proposed to you and to the Legislature in obtaining

* Eight hundred eighty-nine of whom received the increase immediately.

the necessary funds, and such disapproval by Your Honor could not have been overruled by the School Committee.

It seems, therefore, clear to the Finance Commission that the School Committee owed Your Honor the duty of informing you that it intended to make substantial changes in the salary schedule, before you gave your approval to the law.

There is a further point that the Finance Commission desires to call to Your Honor's attention at this time, concerning the School Committee's appropriations. The Legislature allowed, with the approval of Your Honor, an additional appropriating power of 34 cents to the School Committee to meet the increased cost of coal and school supplies as these costs existed last November. It is generally known that these costs have decreased very materially since that time. For instance, soft coal was figured at \$16.50 per ton for the purpose of this legislation, but can now be purchased as low as \$10.50 per ton. Moreover, the mildness of the winter has enabled a considerable saving to be made in fuel. There is, therefore, in the opinion of the Finance Commission, a substantial part of the appropriating power of the School Committee for the item of fuel that need not be exercised this year.

The Finance Commission commends Your Honor's veto of the salary schedule made by last year's School Committee, because the schedule is substantially different from the schedule for which the Legislature and Your Honor authorized the appropriation.

Respectfully submitted,

MICHAEL H. SULLIVAN, *Chairman,*

COURTENAY GUILD,

JOHN F. MOORS,

JAMES M. MORRISON.

J. WALDO POND,

The Finance Commission.

COMMUNICATION TO THE COMMITTEE ON CITIES
in relation to
PROPOSED PAYMENT OF MONEY TO OLIVE P.
GATELY.

BOSTON, March 2, 1921.

To the Honorable the Committee on Cities:

GENTLEMEN,—The Finance Commission desires to present to your honorable committee certain facts relating to the petition of Mary M. Gately that the City of Boston be required to pay to Olive P. Gately a certain sum of money.

The petition is based on litigation concerning certain property, viz., \$15,000 with interest to date, between the City of Boston and the Gately estate. The bill is Senate 30 and is pending before your committee. The facts in the case are as follows:

The property is numbered 468-484 Albany street and consists of land, a pile wharf and dock located on the South Bay. In 1866 the City of Boston paid \$2,800 for the right to construct and maintain a sewer across the premises in question. (See Suffolk County Deeds, Book 874, p. 71.)

In 1896 Grant Gately, husband of the petitioner, purchased the property by deed which was specifically subject to the easement of the City of Boston to lay and maintain a sewer across the premises.

In September, 1902, Mrs. Gately, as the guardian of her two minor children, her husband having died, petitioned the Land and Harbor Commission for permission to build a stone sea wall and to fill in the land back of it. The Sewer Department of the City of Boston objected, as the sea wall would cut off the sewer which had existed since 1866, when the city purchased the easement and constructed the sewer and since that

time maintained it across the premises. Mrs. Gately claimed that the city had no right in or across her property, and Mr. Bailey, then Corporation Counsel, reported that he failed to find any record granting the City of Boston the right to maintain a sewer across the premises.

Shortly thereafter a contract was drawn up by him between the city and Mrs. Gately, acting as guardian of her children, whereby the city agreed to build the wall and fill in back of it, in consideration of the right to construct and maintain a sewer across the premises. This was clearly an illegal contract, because Mrs. Gately, as guardian of her children, could not, without license of the Probate Court, grant any easement to the City of Boston. This license had not been obtained.

On July 11, 1903, a part of the buildings and wharf was destroyed by fire and the Gately estate collected approximately \$20,000 from the fire insurance companies for this loss. There was some delay on the part of the city in rebuilding the wharf, and upon Mrs. Gately's claim that this delay was causing her a loss, the city, through its Superintendent of Streets, agreed to pay a rent for the wharf of \$450 a month. This rental continued for eight months and a total of \$3,600 had been paid Mrs. Gately, when the new Corporation Counsel, Mr. Babson, ordered further payments stopped, on the ground that the transaction was illegal.

On January 11, 1905, the city made a contract with the Cahill Construction Company for the construction of a sewer, bulkhead and wharf, and under this contract the Construction Company was paid \$18,460.45, of which the bulkhead and wharf were estimated to cost \$10,432.14 and the sewer approximately \$8,028.31. In addition the city dumped about 15,000 loads of filling upon the premises.

Soon after the payment of rent was stopped Mrs. Gately made a claim that the contract had not been carried out according to the specifications, and that the city still owed her a large sum of back rent. On

this claim she received \$9,800 from the city, executing on January 30, 1906, a release as guardian of all claims against the city. In consideration of this settlement Mrs. Gately agreed that the specifications in the original contract, calling for two-inch plank over the entire wharf, might be changed and a gravel surface substituted therefor.

Later Mrs. Gately, as guardian of her minor children, repudiated this release on the ground that she was not authorized to make it by the Probate Court. The Corporation Counsel of the City of Boston has stated that the release is undoubtedly of no effect.

On March 28, 1906, the chief engineer of the Sewer Department wrote Mrs. Gately that it had been reported that the wharf had been damaged by being struck by a barge. Nothing was done by the owners of the property to repair or protect the wharf and as a consequence it fell into disrepair.

In July, 1909, Mrs. Gately, as guardian of her children, brought suit against the city in the Superior Court to recover damages for breach of contract and for rent. The case was referred to an auditor, who found that the break in the bulkhead was due to faulty construction and reported in favor of the plaintiff. The case was subsequently tried before a jury, who found for the plaintiff, \$17,800 on the first count, and reported that if there was any legal liability on the city on the second count judgment should be rendered also for the plaintiff in the sum of \$15,000. The judge, finding there was no legal liability on the city on the second count, ordered a verdict for the city. Both parties filed exceptions to the verdict and in 1913, just before the case was reached for argument in the Supreme Judicial Court, it was settled by agreement of all parties in the sum of \$23,000. This settlement was approved by the guardian *ad litem* of the two minor children and the guardian signed a report as follows:

In the above entitled cause the parties having come to an understanding whereby the defendant is to pay the plaintiffs

the sum of twenty-three thousand dollars without costs, I assent on behalf of the minor plaintiffs to an entry of an agreement for judgment for said amount, believing after a full investigation that it is for the interest of said minors that this settlement be made.

WILLIAM HENRI IRISH.

This report was approved and allowed by the court after a hearing. Exceptions of both parties were waived, judgment was entered for the plaintiffs in the sum of \$23,000, and the money was paid by the City of Boston.

At the time of this settlement all the parties participating in it, viz., the Assistant Corporation Counsel of the City of Boston, William H. Irish, the guardian *ad litem* and next friend of the two minor children, and Edmund A. Whitman, representing the plaintiff, Mrs. Gately, considered it a final settlement of all claims made by Mrs. Gately. There was no reservation of any kind.

On September 11, 1913, the Street Commissioners made a taking of 589 square feet of the Gately property for sewerage purposes, and a petition was brought to recover damages for this taking.

On June 12, 1914, the owners were paid \$6,900 in full settlement of all claims, both under this taking and under a temporary taking, by which the wharf was used and occupied for a year during the construction of additional sewerage works on land taken permanently.

Mrs. Gately and the Gately estate have received from the City of Boston the following sums:

Rent	\$3,600 00
Settlement, 1906	9,800 00
Settlement, 1913	23,000 00
Settlement, 1914	6,900 00
	<hr/>
	\$43,300 00

In addition the city has spent in the construction of the bulkhead and wharf for her benefit, and has caused about 15,000 loads of fill to be dumped upon her property

\$10,432 14

In 1914 and 1915 Mrs. Gately presented a petition to the Legislature seeking to set aside this settlement and to have the City of Boston authorized to pay her the \$15,000 mentioned above. The bill failed of passage in both years.

In 1916, however, ch. 235, authorizing the city of Boston to pay to the minor children of Mrs. Gately, or their legal guardian, the sum of money in dispute, became a law without the Governor's signature. In order to become effective the act had to be accepted by the city government, but Mrs. Gately was unable to convince the City Council of the justice of her claims. As the act had to be accepted before January 1, 1918, and no action was taken prior to that time by the city government, the act was rendered ineffectual.

The petitioner now seeks to obtain through the legislative branch of the government by a mandatory act, and interference with the judicial settlement of 1913, by having the Legislature command the City of Boston to make a settlement based upon the second count set forth above, which amounted in 1913 to about \$15,000, and with costs will now amount to \$22,200.

The Finance Commission submits the above facts and for the following reasons wishes to be recorded in opposition to the bill:

1. If such a mandatory bill is passed by the Legislature it will in effect be an interference with the judicial branch of the government and with the settlements already made.
2. It will force the city to pay a large sum of money for which there is no justifiable warrant, and will create a most unfortunate precedent for the presentation of other cases which have been settled.
3. It will tend to weaken judicial settlements.

Respectfully submitted,

THE FINANCE COMMISSION,
by MICHAEL H. SULLIVAN,
Chairman.

COMMUNICATION TO THE COMMITTEE ON LEGAL AFFAIRS
in relation to
LICENSING AND REGULATING ANIMAL-
DRAWN VEHICLES.

BOSTON, March 2, 1921.

To the Honorable the Committee on Legal Affairs:

GENTLEMEN,—The Finance Commission of the City of Boston wishes to direct the favorable consideration of your committee to that portion of House Bill No. 842 on petition of the Mayor of the City of Boston which seeks legislation to enable the city through its Police Department to license and regulate animal-drawn vehicles.

The commission made a study of this matter in 1919 and recommended to the Mayor that legislation should be sought to enable the city to have this additional taxing power so as to increase the revenue of the city and to provide for means of identifying animal-drawn vehicles.

The matter of taxing animal-drawn vehicles has also been studied by the Mayor's special Committee on Sources of New Revenue and it has concurred in the recommendations of the commission.

At the present time the city Police Department charges \$1 each for all animal-drawn vehicles which are engaged in commercial pursuits, other than business directly connected with the owner. Thus taxicabs, hackney coaches, cabs and express wagons engaged in conveying persons, articles, freight and personal packages for hire and which are classed as common carriers are taxed a fee of \$1 each, while pleasure carriages and wagons used solely in the conduct of a person's private business, such as grocery wagons, coal wagons, ice wagons milk wagons and flower wagons, pay no fees, although

the wear and tear on the highways is as great as the use to which the streets are put in the conduct of the common carrier business. For example, a firm which has a large number of horse-drawn milk wagons pays only 50 cents a year for its license,* and this payment covers all the teams of the owner.

. The Finance Commission believes that a person using the highways by means of large wheeled vehicles should be required to pay an annual fee to the city. If a small fee (of \$2) such as is recommended in House Bill No. 842 were placed upon each wheel vehicle it will give the city a sum of money with which to repair the highways. Moreover, the licensing of these wheel vehicles would enable the city to identify them by issuance of a conspicuous plate and number to be exhibited upon the vehicle.

The reports of the Police Commissioner for the year 1917 show that 13 persons were killed and 365 were injured by horse-drawn vehicles. The reports for 1920 show that 7 persons were killed and 177 injured by horse-drawn vehicles. There is often no means of identifying the wagon that was the source of injury. The licensing of such vehicles will not only tend to greater care on the part of their owners and drivers but also any surplus income over the cost of licensing will be an offset against the expenditure of the city for police and hospital service due to accidents on the streets, and for the repair, in a small way, of highways.

The Finance Commission therefore respectfully recommends that your honorable committee favorably consider House Bill No. 842 so that the owners or operators of all animal-drawn vehicles not now subject to regulation be required to take out a license and pay an annual fee of \$2 a vehicle in the same manner as required for wagons and carriages operated for hire.

Respectfully submitted,

THE FINANCE COMMISSION,
by MICHAEL H. SULLIVAN,
Chairman.

* This is paid to the Health Department for license to sell milk.

COMMUNICATION TO THE MAYOR
in relation to
THE PURCHASE OF CRUSHED STONE BY THE
SUPPLY DEPARTMENT.

BOSTON, March 5, 1921.

HON. ANDREW J. PETERS, *Mayor*:

SIR,— It appears that the Public Works Department in the construction and resurfacing of the city's streets, apart from those let under contract, procures the necessary materials through the Supply Department.

Among other items of those materials there is required annually about 90,000 tons of crushed stone. The specification for this crushed or broken stone is definite, but permits the Superintendent of Supplies to accept a substitute which may in his opinion be sufficient.

The Superintendent of Supplies is not an expert to pass upon the quality of crushed or broken stone. If he did exercise the discretion accorded him under the specification, he would have to rely upon experts procured specially for the purpose from the Public Works Department or elsewhere. He has informed the Finance Commission that he has never exercised this discretion personally or by expert and has never received a complaint from the Public Works Department or elsewhere of any departure from the specification by those who furnished the crushed stone last year for the city.

It is a fact, however, that the kind of stone described in the specification has not been furnished. It is clear, therefore, that some one other than the Superintendent of Supplies, the only person mentioned in the specification to accept a substitute, has permitted a quality of stone other than that designated in the specification to be furnished.

The Finance Commission regards as very vital to proper street construction a proper quality of crushed

stone and believes that the specification in the city contract for this material should be lived up to by those who furnish crushed stone. Obviously this cannot be done under the specification as now drawn.

The consulting engineer of the Finance Commission has made a report upon this matter which, in the opinion of the Commission, covers the matter fully in detail. A copy of this report is herewith transmitted, with the recommendation of the Finance Commission that the matters therein pointed out be considered by Your Honor and the Department of Public Works.

Respectfully submitted.

THE FINANCE COMMISSION,
by MICHAEL H. SULLIVAN,
Chairman.

BOSTON, February 18, 1921.

To the Finance Commission:

GENTLEMEN,—Under a policy inaugurated some years ago, the Superintendent of Supplies makes annual contracts for the crushed stone used in the construction work of the city by the Public Works and Park and Recreation Departments. The city for this purpose is subdivided into ten districts and the contracts are ordinarily awarded in each district to a different contractor, although in some cases certain contractors secure contracts for more than one district.

The total annual amount of stone required for all districts is approximately 90,000 tons, and the total cost approximately \$225,000.

The Superintendent of Supplies is about to advertise for bids for furnishing the city with its supply of crushed stone for the year 1921-22. In view of certain complaints regarding the specifications of the Supply Department under which bids have been received, I have made an examination of the specifications and respectfully submit the following:

The essential matter of the specifications is contained

in a single paragraph on page 10 of the contract form which is as follows:

Hard, sharp, durable broken stone of the best quality of trap or other rock which in the opinion of the Superintendent of Supplies is equal to trap rock and which is free from round or other ill-shaped stones, dirt or other objectionable materials, to be furnished in the following sizes as ordered by the Superintendent of Supplies.

In general, the specification is adequate if properly enforced to secure to the city a proper quality of crushed stone for its construction work. In practice, however, substantially no attention has been paid during recent years to the detailed provisions of these specifications. Considering the details:

1. Hard, sharp, durable broken stone of the best quality of trap rock, or other rock which in the opinion of the Superintendent of Supplies is equal to trap rock, is required. There are several uncertainties in this requirement. For example, trap rock itself varies in quality and is not a uniform product. In general, any fine grained, igneous rock which has not been disintegrated by weather conditions is called trap rock. The most recent practice in defining the quality of crushed stone is to specify the minimum requirements according to certain tests, the principal of which are tests for hardness, toughness and resistance to abrasion.

2. The specifications admit a stone which is equal in the opinion of the Superintendent of Supplies to trap rock. At the first examination this provision seems to be an absurd one, as there is no variety of stone in this vicinity which is equal to trap rock for the purposes for which trap rock is used; that is for concrete work and for the wearing surface of macadam streets. There are, however, certain structures, for example, foundations for granite block and bituminous pavements, retaining walls, foundations for sewers and similar work, in which a softer stone than trap rock, such for example as Roxbury conglomerate, is equally good

for all practical purposes, at a price much less than the price for trap rock.

The provisions that the stone shall be free from all round or other ill-shaped stones plainly eliminates the Roxbury conglomerate from competition, as this material is entirely composed of water-worn stones, cemented together by a matrix of indurated clay. In the process of crushing, many round or, as the specification has it, ill-shaped stones are loosened and become a part of the aggregate. Notwithstanding this provision, practically all the contractors during the past few years have furnished Roxbury conglomerate under their contracts.

3. The suitability of the stone is, under the contract, left to the judgment of the Superintendent of Supplies, rather than the Commissioner of Public Works and his subordinates. It may be that under this clause the Superintendent of Supplies has an option in determining the quality of stone suitable for the particular purpose to which it is to be applied, but it is certain that he has no option except to reject stone manufactured from Roxbury conglomerate.

4. The provision that the Superintendent of Supplies shall be the judge, rather than the Commissioner of Public Works, is an improper one, as the Superintendent of Supplies is not a construction official, and in all probability, except by chance, never sees the material which he has purchased, never has occasion to pass judgment upon it directly, and in practice only takes action to accept or condemn as advised by the Commissioner of Public Works or his subordinates. It would be a much more direct and efficient process were the quality of the stone left to the judgment of the Commissioner of Public Works.

In view of the above facts I believe certain changes should be made in the specifications. If it is the purpose of the department to secure for all purposes a rock equal to the best trap rock, then a specification should be drawn specifying certain definite tests for hardness, toughness and abrasion to which the stone of all contractors should be submitted. This procedure would

involve an unnecessary expense, as there are few, if any, quarries in the Boston area that could furnish a suitable quality of trap rock. Neither does it seem necessary to go to the expense of buying trap rock for all purposes when the Roxbury conglomerate would be suitable for the largest part of the work, as already shown in detail.

If, on the other hand, it is the intention to require a stone of suitable quality for the purpose for which it is to be used, then provisions such as have just been suggested should be made to apply to all stone for street surfacing. Less stringent provisions could be made to apply to the stone used in the Paving Service for foundations and stone used in the Sewer Service. The judge of the quality of the stone in any case, should be the Commissioner of Public Works, acting through his subordinates, and not the Superintendent of Supplies.

The application of the ordinary tests for crushed stone, that is, for hardness, toughness and abrasion, to the testing of the Roxbury conglomerate offers practical difficulties on account of the peculiar composition of the aggregate of conglomerate. On account of the small size of the samples used for test purposes and the variation in the quality of the pebbles that compose the conglomerate, there would probably be a great variation in tests, particularly as regards toughness and hardness. Although it is known that there is a great variation in the quality of conglomerate in the ledges in Boston,—in fact some of it is so hard that it might be suitably used as a surfacing for macadam streets having a bituminous binder,—it is doubtful if any of the tests now in common use, with the exception of the abrasion test, would be of great value.

Whatever may be the character of the specifications they should be enforced, both in the interests of the city and in the interests of fair bidding to competing contractors, according to the letter of the contract.

Respectfully submitted,

GUY C. EMERSON,
Consulting Engineer.

COMMUNICATION TO THE MAYOR

*in relation to*THE TRANSFER FROM THE MAYOR TO THE
LICENSING BOARD OF THE LICENSING
AND REGULATING OF THEATERS, PUBLIC
AMUSEMENTS, ETC.

BOSTON, March 11, 1921.HON. ANDREW J. PETERS, *Mayor*:

SIR,— In compliance with your request of the seventh instant for a report of the Finance Commission on House Bill 807, which would transfer from the Mayor of Boston to the Licensing Board of the city the licensing and regulating of theaters and all public amusements, entertainments and public halls in the City of Boston, the Finance Commission submits the following report:

For some time prior to 1905 the licensing of theaters, entertainments, public amusements and public halls in the City of Boston was under the joint control of the Mayor and City Council. This control by more than one authority resulted in abuses of various kinds, the chief of which was the free pass privilege and other favors especially from the theaters, which weakened, if in fact it did not entirely nullify, any effective censorship and regulation of the theatrical performance, public amusements and entertainments. Therefore, in 1905, the power of licensing and control of theaters, public entertainments and amusements was lodged in the chief executive of the city. For sixteen years since that time this policy has proved wise. All complaints can be lodged before a single individual, and immediate and effective action, if necessary, can be obtained.

Moreover, under the direction of the different mayors since that time a very satisfactory method of procedure

in dealing with this very important municipal function has been developed. A voluntary committee of twenty-five citizens assists the Mayor in this work. At the present time the Rev. Raymond Calkins is chairman, and among the membership are such men as Rev. Michael J. Scanlan, Rev. Paul Revere Frothingham, Rabbi Harry Levi, Edward Chandler and Bernard J. Rothwell.

Boston probably has more theaters, moving picture houses and public places of amusement and entertainment than any other city of its size in the country. The public is vitally interested in the forms and kinds of amusements and entertainments that are offered to its citizens and especially to its youth and children. No better assurance can be afforded the people of Boston that objectionable kinds and forms of amusements will not be permitted in public places than to have the licensing and control of those public places in the hands of its chief executive, advised by twenty-five prominent and public-spirited citizens.

It is now proposed to take this power from the Mayor and transfer it to the Licensing Board, a state commission of three persons, whose members are appointed by the Governor. This proposed transfer will violate the very purpose accomplished in 1905 when the authority was lodged in a single person.

In 1906, when the power over the police of Boston was taken from the Licensing Board, it was done largely to make the police service more effective and better disciplined, by having a single commissioner instead of a commission of three persons.

The Governor of the Commonwealth who suggested this change in 1906 stated in his inaugural message an objection equally applicable to the bill under consideration. He said:

Disagreement, moreover, as to method among three perfectly sincere men may create delay at any time and prevent the promptness of instant action in emergencies, absolutely necessary for an effective police.

The Finance Commission believes that the licensing and control of theaters is a police power which should be lodged in one person and not in three.

The commission desires also to point out that, although the licensing of the sale of intoxicating liquors is no longer a duty of the Licensing Board, it has as many duties to perform as it had before the abolition of the intoxicating liquor traffic. These duties in detail may be seen by reference to the last two reports of the Licensing Board, and by the following quotation, which is taken from a letter dated March 10, 1921, from the chairman of the Licensing Board to this commission:

I might say that since the passage of the True Name Bill, so called, with the consequent licensing of lodging houses and the additional restrictions placed on hotels, and also with the coming of prohibition, and the consequent temptation to our licensees as well as others to sell liquor or its substitutes unlawfully, the actual work of our Board has considerably increased.

It would seem, therefore, that this bill would deprive the Mayor of the city of a peculiarly municipal function and transfer it to a three-member Board, appointed by the Governor for terms of six years, the chairman of which Board now states that it has more duties to perform than it had prior to the abolition of the licensing of the sale of intoxicating liquors.

The passage of this bill, in the opinion of the Finance Commission, would not only be a step backward in the progress obtained in licensing and controlling public amusements, but would be a serious infringement of a municipal function that should rest with the responsible official of the people.

Respectfully submitted,

MICHAEL H. SULLIVAN, *Chairman*,
COURTENAY GUILD,
JOHN F. MOORS,
JAMES M. MORRISON,
J. WALDO POND,

The Finance Commission.

COMMUNICATION TO THE MAYOR
in relation to
SPECIFICATIONS FOR BITUMINOUS ROAD
MATERIALS.

BOSTON, March 21, 1921.

HON. ANDREW J. PETERS, *Mayor*:

SIR,—Inclosed herewith please find a report to the Finance Commission from its consulting engineer on the specifications on which the city has advertised for various bituminous materials for road construction for the coming season.

The Finance Commission believes that its consulting engineer has pointed out in this report a very confusing situation, and one that easily may be very costly to the city, and recommends that Your Honor point out to the Superintendent of Supplies and the Commissioner of Public Works the necessity of changing the specifications to comply with the suggestions made by its consulting engineer in the report herewith inclosed.

Respectfully submitted,

THE FINANCE COMMISSION,
by MICHAEL H. SULLIVAN,
Chairman.

BOSTON, March 19, 1921.

To the Finance Commission:

GENTLEMEN,—The last issue of the *City Record* contains invitations to bidders issued by the Superintendent of Supplies for supplying to the Public Works Department various bituminous materials for road construction during the ensuing season, bids to be opened Friday, March 25. These materials include

road asphalt for construction, refined tar for construction, emulsified asphalt for cold patching and tar for cold application.

I have examined the specifications issued to bidders and submit the following:

As regards the technical matter of the specifications there is no criticism, these specifications having been — except for cold patching material — taken directly from the typical specifications for bituminous road materials of the United States Department of Agriculture, Office of Public Roads and Rural Engineering, Bulletin 691, as has been recommended by the Finance Commission in previous reports. The criticisms are as regards the method of paying for materials which may, I believe, in certain cases cause confusion, unless the method is more completely specified.

For example, the specifications for road asphalt for construction, "The contractor shall furnish and apply 900 tons, more or less, of road asphalt for construction . . . on such streets as may be designated by the Commissioner of Public Works within the city limits . . . per ton," instead of per gallon as is the prevailing custom.

This material is at ordinary temperatures a semi-solid material and so far there is no objection to the payment at a price per ton, but the requirement that it shall be applied to the streets by the contractor involves a complication, as the material must be applied in a liquid form at a temperature of approximate 300 degrees Fahrenheit. The unit of application for hot asphalt as applied to the street is the gallon, the number of gallons being determined by calibration of the body of the tank wagon used, a simple process for the inspector of construction.

On account of the expansion of the material on heating, amounting to approximately 1 per cent for each 25 degrees increase in temperature, a ton of asphalt which would contain approximately 233 gallons at atmospheric temperature, or 77 degrees Fahrenheit,

would show when heated to 300 degrees Fahrenheit an increase of 21 gallons, or a total of 254 gallons per ton. It is therefore apparent that in order to determine the number of tons applied to the street, either the cart with its load would have to be weighed on scales, which are not always convenient of access, and the tare deducted to find the net weight; or, as an alternative in case scales are not available, the inspector would be obliged to calibrate the tank wagon, find the number of gallons contained and reduce the volume to tons, a process requiring an unnecessary amount of calculation, particularly if there should be a dispute as to the temperature at which the tonnage should be reckoned, in which case additional calculation would be involved.

The payment per ton may also involve a complication between the contractor supplying the asphalt and the subcontractor applying it, in case such an arrangement is made, as the price for application would undoubtedly be per gallon. It therefore seems to me that, in order to avoid complication, the specifications should be made more definite by one of the following expedients:

Make the price per gallon as applied on the road,

or

Specify that the price per ton shall be calculated from the number of gallons delivered at the temperature specified, reduced to the ordinary temperature for testing asphalt, seventy-seven degrees Fahrenheit.

Unless some such expedient is adopted there is sure to be more or less friction and dispute between the contractor and the Public Works Department regarding the amount for which the contractor should be paid.

REFINED TAR FOR CONSTRUCTION.

The invitation to bidders states that the contractor shall furnish and apply 450 tons, more or less, of refined tar at a price per gallon. In this case the specification

of the amount in tons and the payment per gallon involves no serious consequences. The temperature at which the number of gallons is to be calculated is not made clear, however.

This material has an even greater coefficient of expansion than asphalt. At 77 degrees Fahrenheit a ton of tar of the gravity specified would contain approximately 192 gallons, while at the temperature of 300 degrees, the maximum specified heat as applied, there would be an increase of 23 gallons, or a total per ton of 215 gallons. These specifications should be made more definite by informing the contractor whether the price per gallon is to be at atmospheric temperature or at the temperature as applied.

HOT TAR PATCHING MATERIAL.

Although this material is to be paid for on a per ton basis, I understand it is not to be applied by the seller, but will be heated and applied either by city forces or under separate contracts. Assuming such conditions, there is no objection to the basis of payment proposed.

No criticism is made of the two remaining specifications, as they are for materials to be applied cold, either by city forces or under contracts independent of the purchase contract.

Respectfully submitted,

GUY C. EMERSON,
Consulting Engineer.

COMMUNICATION TO THE MAYOR

*in relation to*THE ACCEPTANCE OF CHAPTER 129 OF THE
ACTS OF 1921, PROVIDING FOR THE PAY-
MENT OF A SUM OF MONEY TO THOMAS
F. GOODE.

BOSTON, April 6, 1921.HON. ANDREW J. PETERS, *Mayor*:

SIR,—The Finance Commission is in receipt of a request from Your Honor for advice on the course Your Honor should follow in the matter of giving your approval to a recent act of the Legislature — ch. 129 of the Acts of 1921 — authorizing the City of Boston to pay a sum not exceeding \$4,000 to Thomas F. Goode.

This authorization of the Legislature is based on an injury received by Thomas F. Goode while assisting a police officer of the City of Boston.

It appears that on October 18, 1920, about three o'clock in the morning, Patrolman Galvin of Station 3 had arrested a man for cause and was taking him to the station house, when he attempted to escape. In the struggle that ensued the arrested man drew a revolver and attempted to shoot the officer. While the struggle was in progress Thomas F. Goode appeared, on his way home from work. Officer Galvin, feeling that his prisoner was about either to overcome or kill him, called in the name of the Commonwealth upon Mr. Goode to assist him. Mr. Goode, without hesitation, came to the officer's relief, but was shot by the prisoner, the bullet entering his hand between two of his fingers, and lodging close to the wrist.

Although wounded, Mr. Goode rendered further aid to the officer so that the prisoner did not escape. The foregoing is a summary of the testimony given by Officer Galvin.

It is difficult for the Finance Commission to imagine a case that would better illustrate the spontaneous and patriotic response of a citizen to a call in the name of the Commonwealth for the preservation of peace and the maintenance of law.

That a fellow citizen, called upon in the name of the Commonwealth by a police officer who was attacked by a desperate character in the night-time, responded instantly, endangering his life, is a matter of which every citizen in the city should be proud. It was a brave act and one fully meriting the public thanks of Your Honor in the name of the people of this city.

The Finance Commission recommends that Your Honor approve the legislative act authorizing the city to pay such an amount, not exceeding \$4,000, as you are satisfied is warranted by the injury and the circumstances under which it was received.

The Finance Commission makes no recommendation as to what part of \$4,000, if not the whole, Mr. Goode should be paid, believing that the determination of the amount should be made by the City Council and Your Honor without suggestion, upon such investigation as you desire to make.

Respectfully submitted,

THE FINANCE COMMISSION,
by MICHAEL H. SULLIVAN,
Chairman.

COMMUNICATION TO THE MAYOR
in relation to
THE RETIREMENT OF GEORGE A. BETTERS.

BOSTON, April 15, 1921.

HON. ANDREW J. PETERS, *Mayor*:

SIR,—The Finance Commission is in receipt of your communication of March 23, relative to the retirement of George A. Betters, an employee of the Public Buildings Department. Your Honor has submitted two questions to the commission:

1. What course should be followed in the petition of Mr. Betters for retirement under ch. 574 of the Acts of 1920?

2. What course should be followed by you in future applications for retirement under this act?

The act referred to provides for the retirement of all Spanish, Philippine Insurrection and World War veterans of three classes as follows:

1. Employees who have been in the service of the city for thirty years.

2. Employees who have been in the service of the city ten years and who have become incapacitated for active service, *provided* their total income from all sources does not exceed \$500; and

3. Employees who have reached the age of fifty years, have been ten or more years in the service of the city, and are incapacitated for active service, *provided* they have a total income from all sources, *exclusive of the retirement allowance*, not exceeding \$500.

Mr. Betters, who has petitioned for retirement under the act, is under fifty years of age and his term of employment by the city is less than thirty years. He

therefore comes under class two, having served the city ten years or more, and being incapacitated for active service, but as his annual salary is \$1,800, if he were retired under the provisions of this act he would receive a retirement allowance of \$900. This amount being in excess of the \$500 mentioned in the act from all sources excludes him from the benefits of the act.

You will observe that a distinction has been drawn by the statute between the total income of a veteran seeking retirement under this act who has not reached fifty years of age as against one who has reached fifty years of age. In the former case if his retirement allowance exceeded \$500 he cannot have the benefit of this act. In the latter case it specifically provides that his income from all sources, "exclusive of the retirement allowance," must not exceed \$500.

Moreover, the commission is informed by the federal authorities, that Mr. Betters on February 16, 1921, entered training under the Vocational Bureau for Vocational Education and has been receiving \$100 a month since that time. His income, outside of his retirement allowance is now at the rate of \$1,200 per year and therefore would disqualify him for retirement under this act.

As to the course that should be followed by Your Honor in dealing with future applicants for retirement under this act, the Finance Commission suggests that the following facts should be determined independent of the applicant:

1. That the applicant is a veteran of at least one of the three wars named in the act.
2. The age of the applicant.
3. Length of his city service.
4. Has he become incapacitated for active duty?
5. Is his total annual income from all sources "exclusive of the retirement allowance," in excess of \$500?

It ought to be comparatively easy to determine the first three facts. In determining his incapacity the

Finance Commission believes that Your Honor should have an examination made by medical men independent of those regularly employed by the city in its departmental work, and suggests that the trustees of the City Hospital appoint, upon the nomination of the senior medical staff, three physicians, one of whom shall be a surgeon, one a practising, medical man and the third a neurologist. This procedure the Finance Commission has incorporated in its pension bill recently filed with the Legislature and believes it to be the best and safest means of assuring impartial and adequate examinations for incapacity.

The determination of the remaining fact, namely, the applicant's income, can in one case be simply made. That is to say, if a man receives over \$1,000 salary he cannot be retired under the provisions of this act unless he is fifty or more years of age and has been employed by the city thirty years. In all other cases in determining the income, exclusive of the retirement allowance, examination of the applicant should be made under oath or his statements should be supported by affidavit.

Respectfully submitted,

THE FINANCE COMMISSION,
by MICHAEL H. SULLIVAN,
Chairman.

COMMUNICATION TO THE COMMITTEE ON METROPOLITAN
AFFAIRS

in relation to

BUILDING OF TRAFFIC TUNNELS BETWEEN
BOSTON AND EAST BOSTON.

Boston, April 18, 1921.

To the Honorable the Committee on Metropolitan Affairs:

GENTLEMEN,—The Finance Commission has made such investigation as the time available allowed of the matter of building traffic tunnels between Boston and East Boston, as provided in the bill filed by the Joint Board composed of the Division of Waterways and Public Lands of the Department of Public Works of the Commonwealth and the Transit Department of the City of Boston.

As the result of its investigation the Finance Commission believes:

1. That the two reports of the Joint Board fail to establish a need of more or different transportation between Boston and East Boston than now exists, and that the latest report is not warranted in its conclusions regarding future growth of traffic between Boston and East Boston.

2. That there is nowhere, so far as the Finance Commission can learn, a tunnel under water for the use of automobiles operated by gasoline engines. The ventilation of such tunnels is still an unsolved problem. Present knowledge for securing adequate ventilation and fire protection of such tunnels does not warrant their construction.

3. That the method of financing the construction

and operation of such a tunnel (if it were otherwise necessary and practicable to do so) recommended by the Joint Board is uncertain as to tolls, unwarranted as to the City of Boston and unjust to the Commonwealth.

4. That any system of transportation which does not provide for the absolute discontinuance of the East Boston ferries should not be considered.

5. That a tunnel or tunnels built according to the general plan outlined by the Joint Board would neither provide adequate communication between Boston and East Boston nor aid appreciably in the development of the East Boston district, nor would it render the present ferries unnecessary.

6. That the tolls estimated by the Joint Board would be prohibitive to all classes of traffic, and that as a matter of fact, except possibly for a short time after the tunnel was built, no tolls would be collected and the entire cost and maintenance of the tunnel would fall upon the City of Boston or the Commonwealth.

7. That the 5 per cent. grades on which it is proposed to construct the entrances and exits of the tunnel would be prohibitive for any traffic except light pleasure automobile traffic.

8. That pleasure automobile traffic, originating beyond the limits of the City of Boston and where there is an alternative route, furnishes no adequate reason for the construction and maintenance of such a tunnel as is proposed.

9. That the additional distance involved in the passage through the tunnel between the areas in the City of Boston needing this transportation would be such that few commercial automobiles would use the tunnel.

In view of the above conclusions the Finance Commission recommends that your honorable committee give the petitioners leave to withdraw.

Appended hereto is a report of the Finance Commission's consulting engineer, which treats the matter in greater detail.

Respectfully submitted,

MICHAEL H. SULLIVAN, *Chairman*,
COURTENAY GUILD,
JOHN F. MOORS,
JAMES M. MORRISON,
J. WALDO POND,
The Finance Commission.

BOSTON, April 14, 1921.

To the Finance Commission:

GENTLEMEN,—By instruction of the chairman I have made an examination of the report of the Joint Board comprising the Division of Waterways and Public Lands of the Department of Public Works of the Commonwealth and the Transit Department of the City of Boston, relative to a traffic tunnel to connect Boston and East Boston, and respectfully submit the following information. In making this report I have followed the order in which various subjects are considered in the printed report of the Joint Board, dated January 2, 1920.

The problem of additional facilities for transportation to and from East Boston has been studied for many years, the alternatives to ferries being either bridges or tunnels. Since the death of former City Engineer William Jackson, who was the principal advocate of the bridge method, it has been generally concluded by investigating bodies that such a connection with East Boston is impracticable, and the construction of a teaming tunnel has been the method upon which the entire energies of those people having political and property interests in Boston have been applied.

The matter of a teaming tunnel has been reported upon officially in recent years at least twice by boards

of which the Boston Transit Commission has been a member. The reports of these commissions are contained in the reports of the Boston Transit Commission for the years 1908 and 1911. Both of these reports are definite in their conclusions that the construction of a tunnel would not be desirable and also that the construction of a tunnel would not give such relief as would admit of the discontinuance of the ferry service. The conclusions of the Board of 1908, in addition to the great expense, based their objections upon sanitary reasons due to the use of the tunnel by horse-drawn vehicles. The conclusions of the Joint Board of 1911 contain the following statement, after detailing the sanitary objections above mentioned:

The matter may, however, properly be reviewed when mechanical power is more generally substituted for animal power, since such substitutes will do away with some of the existing obstacles to successful operation and will render possible shorter and less expensive approaches with steeper grades.

The present report apparently assumes that the changed conditions anticipated have arrived, as it is based on such assumptions. Statistics show that at the present time the vehicles crossing the ferries are about equally divided between horse-drawn and motor-driven conveyances.

The consensus of opinion of the best authorities on teaming traffic is that there has been no great diminution in the amount of horse-drawn traffic on Boston streets on account of the substitution of motor vehicles, probably not more than 25 per cent. as a maximum; also that there will continue to be a large amount of horse-drawn traffic for a long term of years, if not permanently, the rising prices for fuel, oil and manufacturing materials tending to limit the displacement of horses by automobiles. The total number of automobiles, especially pleasure cars, however, is increasing and will continue to increase. Additional motor trucks will take care of new business.

Considering the subjects of the latest report of the Joint Board in the order in which they are presented:

NEED OF TRAFFIC THOROUGHFARES.

The need of better traffic facilities under certain conditions of weather and tides is admitted, if they can be obtained at a cost in any way commensurate with the advantages gained. The Joint Board states that the experience of the past four years is that the motor traffic is increasing at the rate of 25 per cent. a year, and presents statistics and charts to show this increase. This statement is misleading. The inference naturally drawn by the reader from this is that the total traffic to and from East Boston is increasing rapidly. This is not a fact. Although automobile traffic has perhaps increased in the past three years as stated, the total traffic to East Boston has not increased, and the increase in automobile traffic has been largely for pleasure cars. This fact, taken in connection with the fact that the total traffic has not increased, indicates that, so far as the number of vehicles is concerned, commercial traffic has fallen off. It may be that on account of the larger loads carried by automobile trucks this diminution in commercial traffic is not as much as would appear from an analysis of the number and different types of vehicles crossing the ferries. All available facts, however, point to the conclusion that there has been no increase in commercial traffic to East Boston in recent years.

The figures of the Ferry Service of the Public Works Department for ten years show the total number of paid vehicles crossing the ferries to be as follows:

1911-12	946,144	1916-17	983,848
1912-13	995,101	1917-18	1,010,471
1913-14	969,655	1918-19	953,950
1914-15	968,324	1919-20	1,012,071
1915-16	1,018,666	1920-21	983,754

Average for ten years, 984,198

From which it will be seen that the number of paid vehicles in the last year, 1920-21, for which there is record available was substantially the same as the average for the period of ten years. For the ten-year period previous to 1911-12 the average is slightly lower, being 920,257. This lower average does not indicate that there was a substantially less amount of traffic on the ferries, but is undoubtedly due to the fact that previous to 1912 there was no accurate account of traffic kept. The agitation of the Finance Commission and its reports rendered in 1912 regarding lax methods in the ferry service resulted in a ticket system being installed at the ferries and a more accurate account being kept of the traffic since that time. This resulted in showing an increase of vehicles since 1912, and there is little question that the average for the past twenty years would not vary greatly from the average for the ten-year period just past, were it possible to determine the figures accurately for the ten-year period previous to 1912. It is therefore probable that the increase of traffic to East Boston has been so small as to be negligible and is not a large annual increase, as the Joint Board's report would indicate.

There has, however, been a decided increase in the number of pleasure vehicles carried and also in the number of auto trucks. The increase in the number of auto trucks is offset largely by the reduction in the number of two, three and four horse vehicles. The number of pleasure vehicles has also been offset in some degree by a reduction in the number of hacks and horse-drawn pleasure vehicles. There has been a large increase, however, in the total number of pleasure vehicles. This fact, coupled with the fact that there is no increase in the total traffic, indicates that the commercial traffic across the ferries has been diminishing.

Another factor which has not been taken into account in the Joint Board's report is the fact that during the past three or four years there have been local reasons for a temporary increase in ferry traffic. The conges-

tion during the evening hours of the Revere Beach boulevard has undoubtedly been the cause of diverting a large number of pleasure vehicles to the ferries. The interruption of traffic, due to the construction and repair of the temporary Chelsea South Bridge, has also diverted the traffic of Chelsea to the ferries and East Boston route. The repaving along lower Washington street and Commercial street in the city proper and Chelsea street in Charlestown has also contributed to the same result. It is therefore probable that the increases shown in the ferry traffic for the years 1915, 1917 and 1919 was due to temporary causes.

There is undoubtedly, and will continue to be, a considerable increase in motor traffic. By far the greater percentage is pleasure vehicles, which use the ferry route in passing from the city to the pleasure resorts of the North Shore. These vehicles do not in any way add to the commerce of East Boston, neither do they return any benefit to the city, as the cost of carrying them across the ferry is much greater than the return received in tolls. The cost of street repairs due to this increased traffic is a considerable annual cost to the City of Boston, and instead of encouraging such traffic it should be discouraged by the raising of the ferry tolls to an amount more nearly commensurate with the service rendered. No cost for a tunnel should be assessed on the City of Boston on account of such traffic.

At the present time the city furnishes for seven cents transportation for about one third of a mile for an automobile and seven passengers. Considering the amount of gasoline, wear on tires, etc., that would be entailed should the automobile take any other route, it can easily be shown that the city presents to the automobile owner not only a pleasant excursion across the harbor, but actually saves him an amount in operating expenses equal to a greater amount than the amount of the fare received.

The report of the Joint Board dwells frequently upon

the fact that the traffic tunnel under the Hudson river, connecting New York and New Jersey, has been begun, and the inference to be drawn is that similar conditions exist in Boston as in New York. As a matter of fact the controlling considerations are entirely different. Boston at all times has a physical connection with East Boston by way of Chelsea. The distance by way of Chelsea and the bridges is short and can be quickly covered by motor traffic in cases of emergency. There is no possibility in Boston of a contingency arising such as furnished argument for the Hudson River tunnel; that is, that a strike by marine workers might diminish to a dangerous degree the fuel and food supply of the city. Such supplies for Boston are dependent neither upon the ferries nor upon tunnel facilities.

The statement that the tunnel will unite the entire metropolitan district and promote communication throughout the Commonwealth is rather sweeping. As already stated, a tunnel would assist in reaching certain pleasure resorts on the North Shore, and in the late evening persons who were caught in the crush of the Revere Beach boulevard would undoubtedly use the tunnel as a quick means of reaching the city, but how communication with the entire state would be assisted needs further explanation. If the statement is in any great degree true, it is an argument that the entire cost of such a tunnel should be placed on either the metropolitan district or the state as a whole and not on the City of Boston. This matter will be again considered in the following paragraph.

CONTEMPLATED DEVELOPMENT IN EAST BOSTON.

The fact that the Commonwealth is committed to an enormous expense in developing land in the East Boston district without any definite prospect of adequate returns no doubt contributes to the enthusiasm of that part of the Joint Board comprising the Division of Waterways and Public Lands.

For many years politicians and office seekers expatiated

on the necessity of port development in the City of Boston. The act creating the Directors of the Port of Boston was the result of this enthusiasm, and the state has incurred an immense expense for construction and maintenance, as was foreseen, on account of the construction of piers in both East Boston and South Boston, without any adequate return. Fortunately the dry dock, which was to be a panacea for all the troubles preventing the development of Boston, has been disposed of to a paternal national government at a price that does not involve great loss to the Commonwealth.

BELT LINE.

The remarks of the Joint Board regarding the belt line railroad connecting the freight line terminals do not seem to have any particular application to the problems being considered. It appears to be admitted that such a belt line is not feasible at the present time, and that the traffic that would be carried by it will be taken care of, to a certain limited extent, by the increased use of motor trucks. This may be true. No one acquainted with the problem, however, will claim that motor trucks will ever be of great moment in developing the export or import traffic of East Boston. The cost of operation of such vehicles will never allow competition with steam railroads and the Board no doubt realizes, and in fact their studies along other lines admit, that economical transportation of freight can only be secured by connections between the East Boston docks and the lines of the railroads connecting with the north and west.

BRIDGE.

The present report of the Joint Board dismisses the matter of the bridge with a statement that "it would be a serious obstruction both to navigation and traffic." Just what distinction is implied between navigation and traffic does not appear. Also:

All shipping on the Mystic and Malden rivers and Chelsea creek to the Mystic and Housac Tunnel docks and the United States Navy Yard would have to pass this bridge.

This second consideration does not present such an insuperable obstacle as would appear. At the present time all of the locations mentioned, except the Housac Tunnel docks, a part of the Mystic docks and the United States Navy Yard, are above bridges. As suggested, it is possible that the navy yard will be moved from its present location in the not distant future. Chelsea creek at the present time has the Meridian Street Bridge near its entrance, and the Chelsea Street and Boston & Albany Railroad Bridges further up. A large part of the Mystic docks is above the Chelsea Bridge, and the important works of the New England Coal and Coke Company are also above the Chelsea Bridge, by which they apparently are not seriously inconvenienced.

To gain access to the Malden river the passage of two highway bridges and a railroad bridge is necessary, and barring the upper reaches of the Mystic river there are three highway and two railroad bridges.

In my opinion the interruption to harbor traffic that would be caused on account of the construction of a low level drawbridge to East Boston has been greatly overestimated, and the bridge problem has been dismissed without such adequate investigation as its importance warrants.

PRESENT STUDY — TWIN TUBE.

The recommendations of the Board's engineers advocate the construction of two tunnels, each tunnel to contain two tracks, one for horse-drawn and other slow-moving vehicles and one for more rapidly moving vehicles; the northerly tunnel being entirely for traffic from East Boston, commencing on the East Boston side in the vicinity of Decatur and London streets and ending on the Boston side in an area bounded by Hanover

street, Cross street, Salem street and Parmenter street; the southerly tube, accommodating traffic to East Boston, starts in the area bounded by Fulton street, Cross street, Hanover street and Richmond street, and ends on the East Boston side, near the junction of Meridian and Paris streets. The total length of each tunnel will be slightly in excess of 5,000 feet, or about one mile.

The distances from the entrances and exits from the streets bounding the wharves on each side is approximately 1,000 feet, so that the traffic between these localities would entail an additional distance of nearly one half mile for each trip, or practically one mile for each trip in excess of the distance across the ferry.

The cost of the plan recommended is estimated as being \$16,150,000, exclusive of the charges for maintenance and operation. This cost does not take into consideration the fact that, especially on the Boston side, the entrances and exits are in neighborhoods at the present time seriously congested, with narrow streets that will require widening and relocating at enormous cost before they can possibly accommodate the large traffic estimated as being available for the tunnel.

No estimate of the cost of necessary street widening is possible at the present time, or will be possible until actual conditions develop. It is safe to say, however, that such costs will add several million dollars of expense to the cost of the tunnel for construction as estimated. A total cost for tunnels and incidental work of \$20,000,000 is a minimum.

It is not contemplated that both tunnels will be built immediately, and authorization is recommended for one tunnel with two tracks, at a cost between eight and nine million dollars. This tunnel will of necessity be used exclusively by automobile traffic.

On Radial Routes.

Plate No. 3, accompanying the report, is cleverly drawn to show that practically all of the important traffic routes from the metropolitan district concentrate at the

East Boston ferries. There is no question as to the accuracy of the workmanship of the plan, but the impression which is apparently intended to be conveyed is that the routes shown on Plate 3 contribute a large part of the traffic which they carry to the East Boston ferries to be transported to East Boston. As a matter of fact this is not the case, and it is doubtful if for many of the routes shown any of the traffic is regularly tributary to the East Boston ferries.

Areas to Avoid Crowding.

The discussion of this problem is significant on account of the fact that it appears to be anticipated that there will be a considerable delay at the exits and entrances of the tunnel and that space must be provided for waiting vehicles at the entrances and to distribute traffic and prevent congestion at the exits. This admission is valuable as an indication of what may be expected, as it offsets in a considerable degree one of the principal claims for the utility of the tunnel, that is, that it will not be subject to the waits that are occasioned by the time between departures of ferryboats, but will be available for the use of a constant stream of traffic without delay at the entrances.

The remaining paragraphs, "Based on Revenues," "Meeting Debt Requirements," "Taxes and Repayments," "Traffic Estimates Cut" and "Sinking Fund Bonds," relate to a discussion of the methods for financing the cost of the tunnel. The discussion is supplemented by Table 1, pp. 14 and 15 of the report. These paragraphs are not important in the present discussion, except to call attention to the fact that the increase in the number of vehicles is not warranted by the facts, that an average toll of 25 cents for each vehicle passing through the tunnel has been estimated, and the need of explanation of the statement:

We think that if ferry traffic declines because of the tunnel the city will be favored financially rather than otherwise, and

that the question of ferry operation is not immediately concerned with the tunnel operation.

The number of vehicles that will use the tunnel is estimated as approximately 1,000,000 for 1925, the first year estimated for the opening of the tunnel, and an increase to 5,850,000 in 1975. For the first ten-year period it is estimated that the traffic will practically double itself. This estimate is not warranted by past history as has already been shown.

Financial Problems as Affecting Boston.

In considering any method of determining the cost to the city of a teaming tunnel, assuming that the cost is to be placed on the city, it should be realized that there is no probability that, except for possibly one or two years immediately succeeding the completion of the tunnel, any return from tolls will be collected. The entire agitation for free ferries since the enabling act, so called, of 1869 has been based on the argument that the ferry was in its nature the same as a street, and that the payment of tolls constituted a discrimination and an additional tax against people using the ferries. The answer to this argument, which has been upheld by the courts, is that the ferries were not comparable to highways, on account of the fact that they not only furnish a way for transportation but furnish actual transportation. Nevertheless, the rate of tolls has been so reduced as to be practically negligible in determining the cost of ferries. The argument which has been sustained as regards ferries probably will not hold as regards the tunnels, which will undoubtedly be regarded as highways and the users entitled to all the privileges of users of highways, including the free use of the tunnels. Incidentally the successful agitation for the abolition of the one-cent additional fare for interest purposes on the present East Boston Tunnel indicates what may be expected with greater cost to the city on account of teaming tunnels.

The cost of the tunnels as proposed, using present estimates as a basis, will be \$20,000,000. Interest and sinking fund charges on this sum at present rates would result in a cost of perhaps \$1,400,000 annually. In addition to this, there would be a maintenance charge, which the Joint Board admits to be \$130,000 yearly. In addition there would be the expense of operating the East Boston ferries with an annual deficit of approximately \$500,000, and the loss of income to the ferries, say \$50,000, making a total of \$2,080,000 yearly, the equivalent of \$1.40 addition to the yearly tax rate.

It is interesting to compare this sum with the amount which the city receives from East Boston in the form of taxes. The total valuation of the real estate for 1920 of the two East Boston wards is \$47,325,200. The tax rate for 1920-21 was \$24.10 per thousand, therefore the total tax from East Boston, neglecting reductions and rebates, was \$1,140,537. The annual deficit therefore for the ferries and tunnels, not taking into consideration payment for the present street railway tunnel, would be nearly twice the entire amount of taxes derived from East Boston, and allow nothing for police, schools, fire protection, parks and other municipal activities.

Tunnel Design.

The plans available for examination and the uncertainty of the type to be adopted do not warrant any analysis of the tunnel design. One element, however, seems to require comment. The figures of East Boston ferry traffic do not indicate any great reduction in the number of horse-drawn vehicles. The opinion referred to indicates that there has been no great reduction in the number of horses on Boston streets. Therefore the importance of horse-drawn traffic must be taken into account in tunnel design. The Joint Board cannot abolish the use of horses in the City of Boston by designing a tunnel ostensibly to be used for horses but actually only possible of use for automobile traffic.

The tunnel as designed shows 5 per cent. grades both at the entrances and exits. The Transit Commission's reports already referred to place the limit of grade for horse-drawn traffic at 3 per cent. and indicate that if possible not exceeding 2 per cent. should be used. It is therefore apparent that the adoption of the 5 per cent. grade in the proposed tunnel was largely for the purpose of reducing the estimated cost of construction. It may be confidently anticipated that after the tunnel has been authorized there will be necessity of additional legislation to authorize such extension of the tunnels and increased cost to secure a maximum of 3 per cent. ascending grades.

Leaving out of consideration for the present the question of horse-drawn traffic, the designed grades of 5 per cent. constitute the maximum practicable for heavily loaded auto trucks, even though such trucks are in perfect condition, which is seldom the case. Figures might be submitted to show the increased cost of automobile traffic due to the steep grades which in importance approach the objections of such grades to horse-drawn traffic. At present it does not seem necessary to present such figures.

In this connection I submit a list of familiar streets that will give the commission an idea of the effect of a 5 per cent. grade:

	Grade.
Beacon street, Charles street to Spruce street . . .	5.70
Boylston street, Park square to Carver street . . .	4.33
Cornhill, Franklin avenue to Court street . . .	4.00
Milk street, Post Office square to Washington street,	4.67
Park street, from Tremont street to 150 feet east of	
Beacon street	4.80
Pearl street, Atlantic avenue to High street . . .	4.80
School street from Tremont street:	
First 100 feet	5.20
Second 100 feet	4.40
Remainder	3.10
State street, Devonshire street to Washington street,	4.60

The average cost of the operating expense of a five-ton truck for depreciation, tires, gasoline and oil is approximately 20 cents per mile, exclusive of depreciation and chauffeur's wages. In going across the ferries the city transports a truck for a space between one third and one half a mile for a fare of 8 cents, and the amount saved may be shown to be, for a truck of the size estimated, considerably greater than the fare charged; that is, the city is actually contributing a certain amount to the owner of the truck in addition to transporting him across the ferry. Comparing this expense with the cost of the long distance after passing through the tunnel, it will be seen that the ferry route for traffic vehicles would save a very large amount each year for vehicles using it. This amount would be increased above the average for vehicles whose destination is the waterfront on either side.

The consensus of opinions of such experts in teaming matters as I have had opportunity to consult is that a 5 per cent. grade would be prohibitive for practically all heavily loaded teaming traffic, without taking into consideration the matter of the toll proposed. It is also their opinion that with a 25-cent average fare and a higher fare for the larger and heavily loaded vehicles, the cost of operation through the tunnel would be prohibitive without regard to grades.

As a typical example, assume a five-ton truck, loaded at Commonwealth Pier No. 1 in East Boston, its destination being some one of the terminals of the New York, New Haven & Hartford Railroad. After crossing the harbor the routes in both cases would meet at the corner of Richmond street and Atlantic avenue. The distance between the Commonwealth Pier and this point therefore is all that need be considered by the tunnel route. The total distance from the Commonwealth Pier through the tunnel to the corner of Richmond street and Atlantic avenue would be approximately 9,000 linear feet, or 1.7 miles, of truck operation. To reach the same point by way of the South Ferry would require approximately

220 feet of truck operation, a difference of 6,800 feet of truck operation, or approximately 1.29 miles, excess for the tunnel route.

The average cost of operation of a five-ton gasoline truck in good condition for gasoline, oil, tires and repairs is approximately 20 cents a mile. It therefore appears that the total cost of operation by the tunnel route would be 34 cents. Adding to this the average fare, as given in the report, the actual and higher fare being impossible to estimate, the total cost for the tunnel route would be 59 cents.

For the ferry route the total distance for truck operation would be approximately .4 of a mile, and the cost of truck operation 8 cents; the fare across the ferry would be 6.2 cents, the ten-ticket rate, making a total of 14.2 cents, an advantage of approximately 45 cents for the ferry route, or 7 cents per ton of freight.

As regards average time consumed, assuming 7 miles per hour, the figure used by the Joint Board for the speed of traffic through the tunnel, the trip by way of the tunnel would consume approximately 15 minutes. By way of the ferry route; allowing the average time for ferry operation, the time would be approximately the same, and without the difficulty and cost of operating over 5 per cent. grades.

Interruptions would be probable at times on both routes, but the probabilities of interruption by the ferries are not greater than the probabilities as regards interruptions in the congested streets of the North End and the passage through Lewis street and Maverick square in East Boston. Added to delays on the streets there will be numerous delays in the tunnels, on account of the troubles to which all motor vehicles are subject, increased by the difficulties of negotiating 5 per cent. grades.

Payment for the Tunnel.

Any unprejudiced estimate resulting from a study of the conditions will convince the investigator of the truth of several facts:

First, that the traffic originating in Boston proper and East Boston will continue to prefer the ferry route to the tunnel route for financial reasons.

Second, that for the greater part the traffic passing through the tunnel will be the traffic that originates beyond the limits of either East Boston or Boston proper.

Third, that the greatest part of the traffic will be pleasure automobiles that should be accommodated by the extension and enlargement of the ferries, parks and boulevards.

The conclusion, therefore, must be drawn that if this tunnel is to be built Boston should be exempted from any share in its cost and the entire cost should be placed either on the metropolitan district with Boston excluded or on the state as a whole, and even in this case Boston should be reimbursed for the 30 per cent. or more taxes which it would contribute to the original construction. The cost of the maintenance of its streets on account of tunnel traffic should be an adequate contribution to the cost of the scheme by the City of Boston.

The report of the Joint Board is remarkable as to its brevity and lack of information regarding essential matters relating to the successful construction and operation of a teaming tunnel. Nearly every paragraph of the report introduces the New York-Hudson River tunnel as confirmatory evidence of its correctness. New York engineering opinion is not infallible and, as already pointed out, conditions that may warrant the construction of a teaming tunnel in New York would not warrant the same type of tunnel in Boston. There have been no sub-aqueous teaming tunnels of considerable length built in this country, although a number have been built in Europe. The success of these tunnels has not been great. So far as I can secure information of the principal tunnels, that is, the tunnel under the river Clyde at Glasgow, where conditions are strikingly similar to Boston conditions, the two tunnels under the Thames at London, and the tunnel under the Elbe at Hamburg, all have been operated intermittently and the

Clyde and Elbe tunnels have been abandoned. It is true that these tunnels were built for horse-drawn vehicles and the automobile furnishes other problems, and in fact more serious ones.

The serious problems as regards operation of a teaming tunnel are ventilation and fire protection. The matter of ventilating tunnels was discussed by the Finance Commission in its report to the Legislature of 1920, in connection with the bill to authorize an auto-way under Beacon street. Since that time many investigations have been made by experts, regarding the effect of carbon monoxide gas, CO, on the human system, and other investigations are still in progress. No definite conclusions have been reached. The conclusions of the Joint Board have apparently been based on a monthly bulletin of the United States Bureau of Mines, herewith appended. This bulletin adds nothing to the common knowledge of the matter.

The Joint Board's report states the opinion that the maximum of four parts in 10,000 of carbon monoxide will not cause serious effects upon persons subjected to such an atmosphere. This conclusion is not convincing. All the evidence points to the conclusion that the effect of CO gas on the human system is more serious than is commonly realized. It may be that the great volume of air necessary to secure less than the maximum injurious percentage of gas can be obtained by mechanical means, but machinery is always subject to breakage and to carelessness of operation.

The second problem, which is intimately connected with the ventilation problem, is the matter of fire protection. With the large number of automobiles in the tunnel, in case a gasoline tank should leak on the 5 per cent. grade, with the gasoline flowing down grade, permeating the ventilating ducts and drainage structures, the effect of an explosion can well be imagined. The large volume of air necessary for ventilation would carry the vapor to all parts of the tunnel and make the

structure with its substructures essentially the same as a large automobile muffler, as regards explosive effect.

It is unnecessary to enlarge on this feature of the case at the present time. An example on a small scale of what might happen is indicated by an accident that took place at the corner of Massachusetts avenue and Boylston street on July 18, 1919. At this place there is a nearly level grade, although the street is usually congested with automobiles. A tank wagon containing gasoline came in collision with a United States Army truck, causing the tank wagon to leak, a stream of gasoline flowing along the pavement. This became ignited by some means, with the result that 14 cars were either destroyed or injured. This effect was on a wide and open street with a very slight grade.

A more recent accident has been reported on Commonwealth avenue near Massachusetts avenue, where a similar trail of gasoline from a leaking tank was ignited by the throwing of a match into a catch-basin. The blaze immediately followed up the street until it reached an automobile, which was destroyed.

Accidents of this type are not only possible but likely to occur with considerable frequency and their results can only be imagined.

As a matter of ordinary business precaution no traffic tunnels should be authorized until the full effect of the plans at present under way for improving the ferries has been determined. In the past year, 1920-21, the city has appropriated in excess of \$1,000,000 for ferry purposes. Three of the older boats have been rebuilt, with new deck plans, so that they will accommodate approximately 70 per cent. more vehicles than as originally constructed. Two new boats of the improved type are in process of construction and will be in service within a few months. When the improvements under way are completed, the ferries should be more efficient than at any time since the service was inaugurated.

Incidental to the report of the Joint Board, it may be pertinent to inquire why the tunnel routes were so designed as to pass directly under the power station of the Boston Elevated Railway Company and the Quincy Market Cold Storage Warehouse? Certainly the slight curvature that would be necessary to avoid these structures would not involve a cost or disadvantages approaching the damages that will undoubtedly be collected in case the tunnels are built on the route shown.

Respectfully submitted,

GUY C. EMERSON,
Consulting Engineer.

APPENDIX A.

AUTOMOBILE EXHAUST CASES IN VEHICULAR TUNNELS.

A. C. FIELDNER.*

PURPOSE AND NATURE OF TESTS.

The rapidly increasing use of motor vehicles and trucks in the United States is creating an entirely new problem in the proper ventilation of tunnels, subways and other confined spaces through which such machines must pass. This problem has become of immediate importance because a tunnel 8,000 feet long is being designed to pass under the Hudson river between New York City and New Jersey. Another tunnel at Pittsburgh 5,700 feet long, through the South Hills, is already under construction, and a third tunnel 6,000 feet long, between Boston and East Boston, is proposed. It is probable that other tunnels will be started in various parts of the United States in the near future.

The ventilation of such tunnels is a serious matter on account of the poisonous nature of automobile ex-

* Supervising chemist, Pittsburgh Experiment Station, Bureau of Mines.

haust gases. It is not uncommon to read about finding a man dead in his garage. Generally this happens on a cold, winter morning, after he has been running the engine with the doors and windows closed.

The poisonous constituent of automobile exhaust gas is carbon monoxide. It is the same gas which has caused the death of so many miners after mine fires and explosions. It is also found in illuminating gas, and there likewise, has caused the death of many persons.

Carbon monoxide has no color, taste or smell. The smoke issuing from the exhaust of an automobile is not carbon monoxide, although where there is smoke there is usually carbon monoxide present. The amount of it present in automobile exhaust gases varies under different conditions of running a machine. Probably the principal cause for variation is the adjustment of the carburetor. A rich mixture may give as high as 10 per cent. carbon monoxide in the exhaust gases. A very lean mixture will give an exhaust gas containing nothing, or perhaps not more than 1 or 2 per cent. All gradations between these percentages occur. For this reason engineers who have to design the ventilation for tunnels have no accurate information on what the average percentage of carbon monoxide is likely to be.

Very few tests have ever been made on cars taken from the street and tested in the condition under which they were operated, and the only way to obtain this information is to run a great many tests on the road under exactly the same conditions as will prevail in tunnels, using cars and trucks of various sizes, so that average results may be obtained for each type of machine.

METHOD OF CONDUCTING AUTOMOBILE ROAD TESTS.

In order to obtain information as to the amount and composition of automobile exhaust gases, the Bureau of Mines has undertaken to make tests at its Pittsburgh station on a number of passenger cars and trucks, about 100 in all. The expense of carrying out the work is being borne by the New York and New Jersey State

Bridge and Tunnel Commissions, who need the information for designing the tunnels under the Hudson River. Pittsburgh is also contributing to the work by furnishing the necessary cars and trucks for making the tests, as the local need for the information is great, to insure adequate ventilation for the tunnel under the South Hills. The work on this problem was started last December. Up to the present time twenty-four passenger cars and trucks have been tested.

In making the tests, an accurately graduated tube containing the gasoline to be used is attached to the carburetor. Another apparatus for collecting the gas sample is attached to the exhaust pipe by means of a rubber tube. The car is taken to the test course and run for exactly one mile at the required speed. During this period the gasoline is accurately measured and a sample of gas is collected. The gas sample is sent to the Bureau of Mines laboratories and is carefully analyzed for all constituents; and from these results the number of cubic feet of carbon monoxide given off by the car is calculated.

Tests are made on a level grade and up and down a 3 per cent. grade, at rates of speed of 6, 10, 15 and 20 miles per hour. Tests are also made with the engine racing, idling and accelerating, so as to reproduce conditions in a tunnel when it is crowded with cars which are starting up after a blockade in the traffic. Nothing is overlooked in obtaining information which will show the worst possible conditions that might arise in a tunnel.

EFFECT OF CARBON MONOXIDE.

The carbon monoxide in exhaust gases is an active poison, for the reason that it unites with the red coloring matter of the blood and prevents it from taking up oxygen from the air. The victim really suffocates in much the same way as if his air supply were shut off. Only a very small percentage of carbon monoxide is needed to render a person unconscious. One per cent. in the atmosphere will produce death very quickly. I

have been in 0.1 per cent. carbon monoxide for one hour and suffered a distinct headache from this exposure.

In order to properly calculate the amount of air that is needed to sweep out exhaust gases from a tunnel, engineers must know what is the largest allowable percentage of carbon monoxide that a person may breathe for several hours without any ill effects whatsoever. This problem is also being investigated by the Bureau of Mines. The work is carried on by Dr. Yandell Henderson, of the Bureau at the Physiological Laboratory of Yale Medical School, New Haven, Conn. He is determining just how many parts of carbon monoxide in 10,000 parts of air may be considered safe.

At the present time authorities differ somewhat in this respect. Practically all of them agree that one to three parts in 10,000 are perfectly safe for at least an hour. A few authorities believe that even five or six parts may be safely tolerated. The work being done by the Bureau of Mines should determine which figure shall be used. These tests are made by subjecting a large number of people, who volunteer themselves for test, to air containing these small percentages of carbon monoxide.

VALUE OF TESTS TO OWNERS AND DEALERS.

The automobile exhaust gas tests when completed will also be of great value to owners of automobiles and trucks and also to dealers, as it will furnish reliable, unbiased information on the efficiency of a given machine under particular conditions. For example, the tests thus far may have shown no difference in the efficiency of different makes of cars and trucks as regards gasoline economy, but cars of the same make showed large variations, due to the fact that the owners were running the machines with improper adjustment of carburetors. Most of them were using very rich mixtures. In fact, the average of twenty-four cars tested showed that 20 to 30 per cent. of the heat in the gasoline went out in the form of unburned gases in the exhaust. In other

words, if the mixture had been leaner the owner would have gotten 25 per cent. greater mileage from a gallon of gasoline.

Drivers naturally adjust their cars to start easily in the winter time. This means that they will use rich mixtures, as a rich mixture starts more easily than a lean one.

It is expected to continue the automobile and truck tests throughout the summer, in order to find out whether less carbon monoxide is produced when the machine operates in warm weather, and the Bureau of Mines is very anxious that owners of automobiles and trucks continue their co-operation in furnishing cars for test.—

United States Bureau of Mines, Reports of Investigations.

COMMUNICATION TO THE COMMITTEE ON
SOCIAL WELFARE
in relation to
THE NEED OF A GENERAL PENSION SYSTEM
FOR CITY AND COUNTY EMPLOYEES.

BOSTON, April 21, 1921.

To the Honorable the Committee on Social Welfare:

GENTLEMEN,— The Finance Commission has studied the need for a general pension system for employees of the City of Boston and County of Suffolk, and presents this report, together with a bill which, if enacted into law, will provide the City of Boston with a general pension system for all (school teachers excepted) of its city and county employees.

Public service pension systems in the United States were provided first for firemen and policemen, because of the hazardous nature of their employment. The systems were supported entirely from public funds. The amount of the pensions varied in different communities. Soon after, other classes of public employees, began petitioning for pension benefits. These petitions have become more numerous every year. The demand for pension legislation is one of the most pressing problems in public life to-day. Many states of the Union have no pension laws at all. In many of those states, counties and cities where pension systems have been adopted, they are neither sound nor uniform in their provisions. The Commonwealth of Massachusetts in 1912 established by law a general contributory retirement system for state employees. No city of the Commonwealth has a retirement system for all city employees.

The City of Boston and the County of Suffolk have ten separate and distinct pension systems in force, wholly supported by public funds with no contributions from employees, yet only one half of those in the service of the city and county are entitled to the possibility of a pension. In addition, there is an annual practice of passing pension bills for individual city and county employees. The pensions provided by these special acts are supported entirely from public funds and invariably provide one half of the salary last received before retirement. These special pension bills for individuals increase in number every year. Employees who have influential friends are able to obtain special pensions for themselves, while others equally long in the service and often in a decrepit condition, but without influential friends, must continue in the service in order to avoid becoming subjects of charity. In the last fifteen years these special pension bills for City of Boston and County of Suffolk employees have amounted to forty-one in number, each of which provided a one half salary benefit, to which the employees made no pecuniary contribution.

There are three kinds of pensions. The first is supported entirely by deductions from the earnings of the employees. The second is supported entirely by public funds. The third is a combination of the first and second.

The first kind of pension above mentioned is compulsory and is essentially paternalistic. The pension, or more properly called the retirement allowance, is in reality an annuity based upon the funds contributed by the employee, with some tontine features. The state or municipality contributes nothing. The connection of the government with this system makes membership in it a condition of employment in the public service and the government also supervises its administration. It is really not a pension at all but an annuity.

The second kind of pension above mentioned is best illustrated by any one of the present systems in the City of Boston. The cost is borne wholly by the city,

with no pecuniary obligation of any kind whatsoever upon the employee. It is not even an aid to efficient service, because the time of retirement is too long deferred.

The difficulty in the third system above mentioned, which is a combination of the first and second, has been to obtain an equal contribution from employer and employee. Where the first system has obtained, any attempt to install the third system naturally has to begin with the smaller contribution coming from the employer. In jurisdictions where the employer is entirely supporting pension systems, the contribution from the employee is the smaller, at least at the beginning of such a system.

Pensions provided by public funds are primarily a means of maintaining efficiency in the public service, and secondly of securing the superannuated against poverty.

Pensions are adopted both in public and in private service to provide an easy and humane way of freeing the service from the presence of those who have become unable to perform a full day's work. Superannuation is not confined to the lower paid working classes. It is a question of old age, and includes all within its scope. There are superannuated heads of departments as well as superannuated clerks. The discharge of an old employee from service, without some provision for his support, is against public policy and public opinion. A superannuated employee retained in service is really a pensioner at full pay, so that his retirement on one half salary is really a distinct financial advantage. Where no pension system exists, the public service is stagnated by the aged and its efficiency materially decreased.

The condition of superannuation is not peculiar to any one public service, nor is it confined to any single governmental agency. It is present in many departments of the City of Boston. It is present and admitted in the departments of the Federal Government. The testimony of the deputy commissioner of pensions at

Washington, as set forth in Report 120 of the Sixty-sixth Congress, First Session, graphically illustrates the present day conditions in government service:

I have found, on making a personal investigation, that approximately 150 of the 870 employees in our bureau would probably take advantage of a retirement law. I can say this, without any reflection upon that 150, nearly all of whom are employed in some manner, that we could dispense with their services at this time and not lose in appreciable degree any measure of efficiency in the bureau. It is not to us a helpful service so far as the administration of pension matters goes. I would say further that at least 50 of that 150 are inefficient and do not render any useful service whatever to us. They could be retired. In order that you may understand just what I mean by what I have said with reference to the number who might retire or be retired under this law, I would say that of the 150 whose services could be dispensed with, 50 efficient clerks would render us a better service and a more useful service than those 150 clerks. If those 150 clerks were to take advantage of the provisions of this bill, the annuity paid to them would approximate \$90,000. The amount of salary paid to them is approximately \$190,000. If their services were not replaced at all with new appointees in this bureau, there would be an outright saving in salaries of \$100,000.

These facts can be duplicated in the City of Boston in case after case, for there are 1,175 persons in the city service alone who are sixty years of age or over. Specific cases are known to the Finance Commission where employees report for duty each morning and remain in the office all day, unable to perform any effective work, but interfere with the younger employees in the performance of their duties. These aged employees are waiting either for death or for a pension. Too old to do real work, and too poor to retire without a weekly income, they drone along, hopelessly waiting.

The Finance Commission in 1920 made a survey of the years of service of city and county employees, and found that approximately 50 per cent. had been in the city and county service over ten years and that many had been employed for years ranging from fifteen to

sixty-three. The tabulations below give an estimate of the proportionate length of city service.

TABLE SHOWING LENGTH OF SERVICE OF CITY OF BOSTON AND COUNTY OF SUFFOLK EMPLOYEES.

YEARS OF SERVICE.*	Employees of City.	Employees of County.	Total.
63.....		1	1
55.....		1	1
54.....	1		1
52.....	2	1	3
51.....	6	1	7
50.....	7	1	8
49.....	7	1	8
48.....	16		16
47.....	22		22
46.....	17		17
45.....	17	3	20
44.....	14	3	17
43.....	25		25
42.....	35		35
41.....	40		40
40.....	40	1	41
39.....	41	1	42
38.....	54	2	56
37.....	91	2	93
36.....	99	3	102
35.....	96	2	98
34.....	76	1	77
33.....	120	4	124
32.....	136	6	142
31.....	142	4	146
30.....	124	6	130
29.....	217	8	225
28.....	164	14	178
27.....	181	13	194
26.....	150	9	159
25.....	391	11	402
24.....	335	11	346
23.....	337	12	349
22.....	311	7	318
21.....	209	6	215
20.....	344	10	354
19.....	269	9	278
18.....	400	31	431
17.....	319	17	336
16.....	257	16	273
15.....	411	14	425
14.....	458	21	479
13.....	433	27	460
12.....	313	13	326
11.....	426	24	450
10.....	384	26	410
Totals.....	7,533	347	7,880

* Assuming continuous service from year first enters service as given by 1920 pay roll book.

In the public service the first object sought by the government is the elimination of the aged, so that opportunity may be afforded for the advancement of the younger employee and the service correspondingly benefited. The choked avenues of advancement are cleared away by pension systems and an added attraction offered to the ambitious and energetic to enter the public service. These reasons apply as well to the disabled as to the superannuated, and have usually been classified under five heads:

1. The elimination of the superannuated (either because of old age or length of service).
2. The elimination of those disabled in service (either by accident or disease).
3. The improvement of the service morale.
4. The retention in service of its better employees.
5. The attraction to service of high grade employees.

It was with these principles in mind that two pension commissions, appointed by the Commonwealth, studied pension problems and upon them their two reports were based. These two commissions, one in 1910 and one in 1914, made extensive reports and the Legislature of 1910 adopted and placed upon the statute books legislation permitting cities, towns and counties to grant pensions to their employees. It has not been generally adopted. The 1914 commission, however, proceeded no further than the submission of a written report. Its recommendations were rejected and no general pension legislation resulted. The pension classes in the City of Boston and County of Suffolk which are supported entirely from public funds, the beneficiaries having made no personal, pecuniary contributions to the pension fund, are as follows:

CLASS.	Rate of Pension.
Teachers *	\$312 to \$600.
Firemen	One half salary.

* Teachers maintain a private retirement fund to which they each contribute \$18 a year and now receive on retirement an allowance of \$120 a year.

CLASS.	Rate of Pension.
Firemen's widows and children under sixteen years.....	\$600 a year.
Policemen.....	One half salary.
Policemen's widows or children under sixteen years.....	\$600 a year.
Laborers.....	\$360 a year.
School janitors and attendance officers.....	\$360 a year.
Probation officers.....	One half salary.
Prison officers and instructors *.....	One half salary.
Court officers of Supreme Judicial and Superior Courts.....	One half salary.
Judges of District Courts and judges of Municipal Court, appointed before June 4, 1920, who have not waived their pension privilege.....	Three fourths pay.
Veterans:	
Civil War.....	One half salary except in counties where maximum is \$800.
Spanish War, Philippine Insurrection and World War (except police officers).....	One half salary.

* Applies only to officers appointed before June 7, 1911.

The only employees who are now excluded from pensions, outside of the professional classes, are the clerical, engineering, investigative and inspection forces of the city, numbering about 6,345. No sound reason can be advanced for excluding these classes from the benefits of a retirement system, except the ground of expense, and if a contributory system is adopted this argument loses a great part of its force. Unless it is the design of the authorities to allow the noncontributory pension system to be extended to other classes of city employees, the only way to lighten the present cost of pensions is to place all employees upon the sound financial structure of a contributory system. If this is done the noncontributory classes will disappear in time and all public employees in Boston will be treated with equal fairness and equity.

The result of the Finance Commission's study of the need of a uniform, contributory retirement system for employees of the City of Boston and County of Suffolk is embodied in the attached bill already filed with your Honorable Committee, as amendatory to or in substitution of House Bill 1085.

This bill contains the following provisions:

1. THOSE WHO MAY BECOME MEMBERS OF THE PROPOSED RETIREMENT SYSTEM.

All regular and permanent employees of the City of Boston or County of Suffolk at the time when the proposed retirement system goes into effect, except school teachers, may become members of this retirement system. All regular and permanent employees of the City of Boston or County of Suffolk who are employed in departments of the city or county that have no pension provisions shall be considered members of this retirement system, unless they indicate in writing within sixty days of the establishment of the system that they do not desire to become members. All regular and permanent employees of the City of Boston or County of Suffolk in departments now having by law provisions for pensions may become members at any time within one year after the establishment of this retirement system upon their written application, provided they waive and renounce all claims under any other pension law or system.

All regular and permanent employees of the City of Boston or County of Suffolk not covered by any pension system, who elect to remain out of this retirement system, may thereafter become members of this retirement system, but in order to get credit for any prior service they must join the system within one year of its establishment.

2. THOSE WHO WILL BECOME MEMBERS OF THE PROPOSED SYSTEM.

All persons who become regular and permanent employees of the City of Boston and County of Suffolk, except school teachers, after this act takes effect shall be included as part of their employment in this retirement system.

Therefore, all employees of the city or county, except school teachers, are included in the system who are now

without any pension provision from the public funds, unless they voluntarily prefer not to join the system; all who are now eligible to a pension privilege from the public funds are not to be disturbed unless they voluntarily wish to renounce what they now have and come into the proposed system. All who enter the employ of the city or county, except school teachers, after this law goes into effect (February 1, 1922) shall become members of this system.

The school teachers have been excluded, because there is now pending before the Legislature a bill filed with the report of the Legislative Recess Committee on Pensions, which includes the Boston school teachers in the state retirement system for teachers. The school teachers of the state, excluding Boston, are now the only employees of cities and towns who are provided with a state retirement system at the expense of the state. In view of the fact that Boston contributes 30 per cent. of the cost of retiring teachers in other cities and towns of the Commonwealth, it is only simple justice that the school teachers of Boston be included in the State retirement system.

3. CONTRIBUTIONS OF MEMBERS.

All who become members of this retirement system shall contribute by having deducted from their salaries on every pay day 4 per cent. of the amount which is due them. This contribution will accumulate at the rate of 4 per cent. per annum, compounded annually, during the time it is retained by the city unapplied to the payment of an annuity. Contributions and their accumulations will be returned to the member who contributes it, or to his executors, administrators, heirs or assigns. No member is undertaking any form of insurance risk, because neither the whole nor any part of his contributions and their accumulations are lost to him or to his heirs.

Should a member leave the service of the city or county for any reason except that of death, the amount of his

contributions and their accumulations are returned to him. In the event of his death while in the service of the city or county the amount of his contributions and their accumulations will be returned to his estate.

4. THE RETIREMENT ALLOWANCE.

The amount that a member receives upon retirement is called the retirement allowance. It is made up of two elements; one called an annuity which is the actuarial yield of the member's contributions from his salary and their accumulations; and the other called a pension, which is an amount equal to the annuity and paid by the City of Boston.

5. WHEN AND HOW A MEMBER MAY BE RETIRED.

(a.) A member may, on his own application, retire at and after the age of sixty years, or he may be retired by the head of his department at or after the same age, regardless of the length of time he has been employed by the city or county. In either case such retirement is called retirement for superannuation.

(b.) A member may be retired for disability resulting from an accident during the performance and within the scope of his duty regardless of how long he has been employed by the city or county.

A member may be retired for superannuation who entered the service at the age of fifty-nine, that is, one year after his entrance and he may be retired for accident disability the day after he enters the service of the city or county. In the former case, retirement is wholly in the interest of the public service. From all available facts and experience, it seems desirable for the best public service to give heads of departments a clear and effective remedy for the elimination of inefficiency because of superannuation.

In the second case of accident disability, retirement is largely in the interest of the member. Public sentiment would hardly sanction or public policy approve the abandonment of a city or county employee who had

been disabled because of an accident received in the line of duty. Provision is now made for some classes of employees in this regard, but it ought to be general and definite.

(c.) A member may be retired for ordinary disability after fifteen years' service. It is not an easy matter to determine with full justice to all parties interested just what the minimum service should be before retirement for disability. On the one hand, if the term is made too short the city becomes an insurer; on the other hand, if the term is made too long, the member feels compelled to continue service long after his disability has rendered him inefficient, in order not to lose the benefit of a retirement allowance. He is allowed to continue on in the service because of the humane considerations of the department head who knows that the disabled employee's efficiency has decreased; in many cases the service rendered by the employee is negligible.

The commission has adopted the term of fifteen years because it believes that such a period of service would be a fair compromise of the above two propositions.

(d.) A member who reaches the age of seventy years must be retired. In a general retirement system, involving thousands of employees performing large range of duties it is pretty well settled that seventy years, at least from the point of view of public interest, is the age at which mandatory retirement should be set.

6. THE AMOUNT OF THE RETIREMENT ALLOWANCE.

Upon retirement for superannuation, the amount of the retirement allowance is determined by taking the actual contributions made by the employee and their accumulations subsequent to the establishment of this retirement system. To that amount is added by the city a sum equal to 4 per cent. of the pay of the member for the term of his service in the city or county prior to the establishment of the retirement system with accumulations at the rate of 4 per cent. per annum compounded annually. The sum thus found shall be the

basis of the annuity of the members. The amount of this annuity shall be equaled with a pension paid by the city.

The very first class of cases that would be retired under this system, if it goes into effect, are those who then have reached the age of seventy years or over. A member of this class would have his retirement allowance determined in the following manner:

It may be assumed that he has worked for the city forty years. His salary during the term of his service will be determined for each year. Four per cent. of his salary will be determined as of every pay day that he has had. Interest accumulations on these deductions from the date at which they are made will be figured at 4 per cent. per annum compounded annually. Having thus determined the amount that his contributions would have been had this retirement system been in effect from the date he began service in the city or county, and the accumulations thereon, an annuity will be computed based on the sum of his contributions and their accumulations, which the city will pay. The city will also pay an amount equal to the annuity so determined, but in no case shall the sum of these two amounts exceed one half of the salary that he was receiving at the date of retirement.

The next class to retire will be those who will have contributed for some period, long or short, before retirement. The retirement allowance of a member in this class is found in the following manner:

Assuming that the member was fifty-five years of age when this system became effective, and had worked for the city thirty years, and retires at the age of sixty, he will have contributed five years. The amount of his contributions and their accumulations would be determined and to this amount would be added the sum of his contributions and their accumulations as they would have been made had the system been in effect when his service in the city began, namely thirty years

prior to the system's establishment. This sum would be furnished by the city and added to his actual contributions would make the basis on which the annuity would be found by actuarial computation. The annuity so found would have a like amount added to it by the city as a pension.

A member who has retired for accident disability will have his retirement allowance determined in the same way as in either of the foregoing classes, except that in all cases whether or not he has contributed, or whether or not he has had prior service, he shall receive an amount equal to three fourths of the annual compensation that he was receiving at the time of the accident.

A member retired for ordinary disability after at least fifteen years of service will have his allowance determined in the same way as either of the first two classes, except that the amount paid by the city as a pension shall not exceed 90 per cent. of the pension the city would have been required to pay if the member remained in the service until he arrived at the age of sixty years and was retired on the same salary that he was receiving when retired for ordinary disability.

The object of keeping the pension slightly less than that allowed for superannuation is to put the burden on the member at all times to exert himself to avoid applying for retirement for ordinary disability.

7. ACCIDENTAL DEATH BENEFITS.

In the event of death from accident in the line of duty any time after service begins, the actual deductions from the member's salary and the accumulations thereon are paid to his estate. In addition, a pension equal to one half of his salary at the time of the accident which caused his death will be paid to his widow during her widowhood, or if there be no widow, or if the widow dies or remarries, to any child or children under the age of eighteen years, to be paid until such child or the youngest of such children shall have reached the age of eighteen

years; and if there be no widow and no children under eighteen years of age, then to the member's dependent father and mother or the survivor of them; if there be no widow and no children under eighteen years of age, and no dependent father or mother, then to the member's dependent brothers and sisters or the survivor of them during dependency.

8. OPTIONS UPON RETIREMENT.

Upon retirement of a member for any cause, he may elect before the first payment of the retirement allowance is made to take a lesser pension than he is entitled to, and if he die before he has received the full benefit of his accumulated contributions and a like amount provided by the city, the balance will be paid to his legal representatives, or to such person having an insurable interest in his life as he, his wife or conservator may designate. Or he may elect to take a lesser pension than that to which he is entitled and have it continued after his death to such person having an insurable interest in his life as he, his wife, or conservator may designate. Or he may elect to take a lesser pension than that to which he is entitled and upon his death have one half of the pension which he had received payable throughout the life of such person having an insurable interest in his life as he, his wife, or conservator may designate.

9. RETIREMENT BOARD.

The Retirement Board as organized is to consist of five persons, two of whom shall be the treasurer and auditor of the City of Boston, the other three to be appointed by the Mayor of the City of Boston, with the approval of the Civil Service Commission, as now provided in the case of department heads. One of such three appointees is to be an employee of the city or county who is eligible to become a member of this retirement system, or is actually a member. One of the three persons appointed by the Mayor is to be designated by him as chairman.

10. MEDICAL BOARD.

The Medical Board is to consist of three physicians, one of whom is to be a medical practitioner, one a surgeon and one a neurologist. The Medical Board must be appointed by the trustees of the Boston City Hospital from nominations made by the senior medical staff of that hospital.

11. RE-EXAMINATION OF MEMBERS RETIRED FOR DISABILITY.

The Retirement Board is charged with the duty of examining annually every person to whom a retirement allowance is being paid for disability. Any person receiving a retirement allowance for disability who refuses to submit to such an examination shall receive no further payments of his retirement allowance. If such examination discloses that the disability for which the member was retired no longer exists, the retirement allowance shall cease and the balance in the retirement reserve fund that was transferred from the annuity savings fund when he was retired for disability must be returned to him.

12. MISCELLANEOUS PROVISIONS.

The funds necessary to pay the contributions made by the City of Boston under this retirement system shall be obtained from funds raised by taxation outside the statutory tax limit of the city for municipal purposes, as defined in sec. 1, ch. 401, of the Acts of 1920. It is thus made a part of the tax rate and not a part of the tax limit, because the greater part of it for about eighteen years is a liability accumulated over the past thirty-five years and bears no relation to current expenses of the city.

No employee of the City of Boston or County of Suffolk because of his membership in this retirement system shall thereby have any status that will in any

way affect the right or power of the city, through its department heads, to demote, transfer, suspend, or discharge him.

The Supreme Judicial Court shall have jurisdiction in equity to compel the observance and restrain the violations of any of the provisions of this act or the rules and regulations made thereunder.

The Retirement Board shall ascertain the amount to be paid by the city for each fiscal year and report the same to the Mayor not later than July 1 of each year.

An employee who is awarded compensation by the Industrial Accident Board on account of death or disability shall have offset against such award benefits paid or payable under the provisions of this act.

No person who is receiving a retirement allowance under the retirement system shall be paid for any service rendered by him to the City of Boston or County of Suffolk, except that rendered as juror.

The contributions made by members and their accumulations are exempted from any state or municipal taxes and are also exempt from attachments by trustee process or otherwise in law or equity, and shall not be subject to executions, neither shall they be assignable.

The Retirement Board is limited to such investments as are now provided for the Sinking Funds Commission of the City of Boston. The city shall allow 4 per cent. interest, compounded annually, on all contributions made by members of the retirement system, regardless of what the actual earnings may be.

Provision is made for the appointment of the Retirement Board some months before the retirement system is to go into effect, in order that the members of the Board may become acquainted with all that has been done leading up to the passage of the law and thereafter in the way of actuarial computations and to have sufficient additional time to establish the necessary machinery to put into effect the system upon the date set for its establishment.

The Finance Commission, having completed its

studies of all the factors necessary to establish a retirement system on the principles set forth in the accompanying bill, has completed practically all of its work of a judicial nature comprehended in the study. What remains to be done by the Finance Commission is merely to direct the actuarial work that will become necessary after the law is passed and before the organization of the Retirement Board.

The Finance Commission therefore recommends that your Honorable Committee report the bill as filed by the Finance Commission.

Respectfully submitted,

MICHAEL H. SULLIVAN, *Chairman*,
COURTENAY GUILD,
JOHN F. MOORS,
JAMES M. MORRISON,
J. WALDO POND,

The Finance Commission.

THE FINANCE COMMISSION'S REDRAFT OF HOUSE BILL
1085 WHICH PROPOSES A UNIFORM CONTRIBUTORY
PENSION SYSTEM FOR ALL EMPLOYEES, EXCEPT SCHOOL
TEACHERS, OF THE CITY OF BOSTON AND COUNTY OF
SUFFOLK.

- SECTION 1. Name of act.
- SECTION 2. Definitions.
- SECTION 3. When the system shall be established.
- SECTION 4. Creation, appointment and pay of Retirement Board.
- SECTION 5. Membership of the system.
- SECTION 6. Creation and designation of funds.
- SECTION 7. Funds from which payments are to be made.
- SECTION 8. Limitations on investments of funds.
- SECTION 9. Retirement for superannuation.
- SECTION 10. Retirement allowance for superannuation.
- SECTION 11. Retirement for ordinary disability.
- SECTION 12. Retirement allowance for ordinary disability.
- SECTION 13. Retirement for accident disability.
- SECTION 14. Retirement allowance for accident disability.
- SECTION 15. Accidental death benefits.
- SECTION 16. Withdrawals.
- SECTION 17. Options upon retirements.
- SECTION 18. Creation of the medical board.
- SECTION 19. Medical re-examination of pensioners for disability.

- SECTION 20. Duties of Retirement Board as to annual reports, mortality tables, rates, etc.
- SECTION 21. Authorization of Retirement Board to make rules and regulations.
- SECTION 22. Provision for monthly payments of pensions and annuities.
- SECTION 23. Exemptions of pensions, annuities and retirement allowances from taxation and attachments.
- SECTION 24. Duty of Retirement Board to ascertain the amount necessary each year to meet the cost of the system and inform the Mayor before July 1.
- SECTION 25. Funds to be raised outside the tax limit necessary for the provisions of this act.
- SECTION 26. Provision against double payments or pensions for employees from public source.
- SECTION 27. No person enjoying pension shall receive pay for any service rendered the City of Boston or County of Suffolk except jury service.
- SECTION 28. Jurisdiction given to the Supreme Judicial Court.
- SECTION 29. Retirement Board may determine length of service and salary by estimation.
- SECTION 30. City of Boston and County of Suffolk retain power to discharge, etc.
- SECTION 31. Repeal of inconsistent acts.

(Submitted by the Boston Finance Commission as amendatory to or in substitution for House Bill No. 1085.)

THE COMMONWEALTH OF MASSACHUSETTS.

In the Year One Thousand Nine Hundred and Twenty-One.

AN ACT PROVIDING RETIREMENT ALLOWANCES BASED ON ANNUITY AND PENSION CONTRIBUTIONS FOR EMPLOYEES OF THE CITY OF BOSTON AND COUNTY OF SUFFOLK.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

SECTION 1. This act shall be known as the Boston retirement act and its purpose is to improve the efficiency of the public service by the retirement of superannuated employees.

SECT. 2. The following words and phrases as used in this act, unless a different meaning is plainly required by the context, shall have the following meanings:

(a.) "Retirement system" shall mean the arrangement provided in this act for the retirement of and payment of retirement allowances to employees of the city of Boston and county of Suffolk.

(b.) "Employee" shall mean a regular and permanent employee of the city of Boston and county of Suffolk, except

school teachers, whose only or principal employment is in the service of the city of Boston or county of Suffolk and whose compensation is wholly paid for by the city of Boston.

(c.) "Prior service" shall mean service as an employee prior to February 1, 1922.

(d.) "Member" shall mean any person included in the retirement system as provided in section five of this act.

(e.) "New entrant" shall mean an employee entering the service of the city of Boston or county of Suffolk on and after February 1, 1922.

(f.) "Accumulated deductions" shall mean the sum of all the amounts deducted from the compensation of a member or contributed by him, as provided in section six of this act and credited to his individual account in the annuity savings fund together with all the interest thereon.

(g.) "Superannuation" shall mean the attainment of sixty or more years of age.

(h.) "Pension" shall mean payments made from funds provided by the city.

(i.) "Regular interest" shall mean interest at four per centum per annum, compounded annually.

(j.) "Benefits" shall mean a pension or annuity allowance or any monetary payment made by the city of Boston.

(k.) "Fiscal year" shall mean the fiscal year of the city of Boston.

SECT. 3. The retirement system shall be established on the first day of February, 1922, and the system shall be known as the Boston retirement system.

SECT. 4. There shall be a retirement board for the retirement of employees of the city of Boston and county of Suffolk created within sixty days after the passage of this act, consisting of five members, two of whom shall be the auditor and treasurer of the city of Boston. The mayor of the city of Boston, subject to the provisions of section nine of chapter four hundred eighty-six of the acts of nineteen hundred and nine, shall appoint the other three members of this board, one of whom shall be a member of or eligible to membership in this retirement system. The mayor shall designate one of the appointed members as chairman. The term of office of the appointed members of this board shall be three years, except that when first constituted one member shall be appointed for

one year, one for two years and one for three years. Each member of the retirement board shall be paid ten dollars per meeting, but not more than one thousand dollars in any one year. The retirement board shall employ an executive officer and such actuarial, clerical and other assistants as are necessary for the proper operation of the system established by this act.

SECT. 5. All employees of the city of Boston and county of Suffolk, except the school teachers of the city of Boston, on the date when this retirement system is established may become members of the system. On the expiration of sixty days from the date when this retirement system is established every employee except the employees covered by any pension or retirement law of the commonwealth of Massachusetts on the date when the retirement system is established shall be considered to have become a member of the retirement system unless within that period he shall have sent notice in writing to the retirement board that he does not wish to join the system. Employees electing not to join within sixty days from the establishment of the system may thereafter be admitted to membership but no employee shall receive credit for prior service unless he applies for membership within one year from the establishment of the system. An employee who is eligible to a pension under any existing law of the commonwealth on the date when this retirement system is established shall not be considered to have become a member of this retirement system unless said employee shall then or thereafter make written application to join the system and shall waive and renounce in writing all benefits of any other pension system supported wholly by the city of Boston or county of Suffolk but no such employee shall receive credit for prior service unless he makes such application for membership within one year from the establishment of the system. All persons who become employees after the establishment of the system, except the school teachers of the city of Boston, shall as a part of their employment become members of this retirement system.

SECT. 6. The funds hereby created are the annuity savings fund, pension accumulation fund and the retirement reserve fund.

The annuity savings fund shall be the fund to which shall be paid the deductions from the compensation of members.

The treasurer of the city of Boston is authorized to withhold four per cent. of the regular compensation due on each pay day to all employees who are members of the retirement system. The amounts so withheld shall be transferred immediately thereafter to the retirement board and credited to the account of each member so contributing and shall be paid into and become a part of said annuity savings fund.

The pension accumulation fund shall be the fund in which shall be accumulated the annual normal and accumulated liability contributions which shall be made by the city. Such annual contributions as are sufficient to provide all pension payments on account of members of the retirement system as determined by actuarial computations on the basis of mortality and service tables approved by the retirement board, shall be paid by the treasurer of the city of Boston to the retirement board in such instalments and at such times as the retirement board shall require.

The normal contributions shall be equal to such percentum of the salaries of all members as is computed to be sufficient to provide during the active service of the average new entrant for all pensions for which the city may be liable on his account.

The accumulated liability contribution shall be computed as a constant percentage of the total pay roll of all members and shall be sufficient to provide during the thirty year period immediately following the establishment of the system for all pensions to be paid on account of members who are entitled to credit for prior service when this system is established which are not provided by the normal contributions made on their account.

The accumulated liability contributions shall be at least equal to regular interest on the amount of the accumulated liability and shall be at least three per cent. greater in amount each year than the amount for the preceding year. The accumulated liability contributions shall be discontinued as soon as the accumulated liability has been liquidated.

The retirement reserve fund shall be the fund to which at the death or retirement of any member shall be transferred:

- (a.) from the annuity savings fund the accumulated deductions of the member, and
- (b.) from the pension accumulation fund an amount equal to his accumulated deductions, and

(c.) from the pension accumulation fund in the case of a new entrant an amount necessary to cover the balance of the pension payments on this account not covered by paragraph (b.).

SECT. 7. From the annuity savings fund shall be paid the accumulated deductions of all members leaving the service except by retirement.

From the retirement reserve fund shall be paid all pensions equal to the annuity and in the case of new entrants also the balance of the pensions payable on their account.

From the pension accumulation fund shall be paid in case of members who are entitled to credit for prior service that part of their pensions which is not payable from the retirement reserve fund.

SECT. 8. The retirement board is authorized to invest the funds of the retirement system in such securities as are allowed for investment by the sinking fund commissioners of the city of Boston.

The retirement board shall annually allow regular interest on the average balance for the preceding year to the credit of the various funds from the interest and dividends earned from investments. Any excess earnings over the amount so credited shall be used in reducing the amount of contributions required of the city of Boston during the ensuing year. Any deficiency shall be paid by the city of Boston during the ensuing year.

SECT. 9. Members of this retirement system who have reached sixty years of age shall upon their application, or upon the application of the head of their department, be retired for superannuation by the retirement board. Members of this retirement system who have attained the age of seventy shall be retired on the first day of the calendar month next succeeding that at which any member shall have attained the age of seventy.

SECT. 10. Upon retirement for superannuation a member of the retirement system shall receive a retirement allowance consisting of:

(a.) An annuity which shall be the actuarial equivalent of his accumulated deductions at the time of his retirement,

(b.) a pension equal to the annuity,

(c.) in addition if a member was in the service at the time the system was established and became a member within one year thereafter an additional pension having an actuarial value

equivalent to twice the contributions which he would have made during his prior service had the system then been in operation, together with regular interest thereon upon retirement but such pension shall not exceed one half of the annual compensation received by him during the year preceding his retirement.

SECT. 11. Retirement for ordinary disability shall be made by the retirement board upon the application of the head of the department in which the member is employed or upon the application of the member or person acting in his behalf stating that said member is physically or mentally incapacitated for the performance of duty and ought to be retired; *provided, however,* that said member has had fifteen or more years of city or county service next preceding his application, and the medical board after examination reports that said member is physically or mentally incapacitated for the performance of duty and that he should be retired.

SECT. 12. Upon retirement for ordinary disability the member shall receive a retirement allowance consisting of:

- (a.) an annuity which shall be the actuarial equivalent of his accumulated deductions at the time of his retirement,
- (b.) a pension equal to the annuity,
- (c.) and an additional pension of such an amount as would together with the pension make up a total pension of ninety per cent. of the pension that would have been provided by the city for the member had he remained without further change of salary in the service of the city or county until he reached the age of sixty and retired.

SECT. 13. Retirement for accidental disability shall be made by the retirement board upon the application of the head of the department in which the member is employed or of the member or of a person in his behalf stating that said member is physically or mentally incapacitated for the performance of duty as the result of an accident occurring during the performance and within the scope of his duty and certifying the time, place and conditions of such service performed by said member resulting in such alleged disability and that such alleged disability was not the result of contributory negligence on the part of said member and that he ought to be retired; *provided, however,* that the medical board after examination reports that said member is physically or mentally incapacitated for the

performance of duty as a natural and proximate result of an accident occurring in the performance and within the scope of his duty and that such disability is not the result of contributory negligence on the part of said member and that said member should be retired.

SECT. 14. Upon retirement for accidental disability a member shall receive a retirement allowance consisting of:

(a.) an annuity which shall be the actuarial equivalent of his accumulated deductions at the time of his retirement.

(b.) a pension equal to the annuity,

(c.) an additional pension of such an amount as will together with the annuity and pension be equal to three fourths of his annual compensation at time of retirement.

SECT. 15. Accidental death benefits shall be granted by the retirement board upon application by the head of the department in which the member was employed or of a person in his behalf upon proof that he was killed or died as the result of an accident while in the performance and within the scope of his duty. Such accidental benefits shall be:

(a.) his accumulated deductions which shall be paid to his legal representatives,

(b.) a pension equal to one half of his annual salary received by him at the time of his death and shall be paid:

(1.) to his widow during her widowhood,

(2.) if there be no widow or if the widow dies or remarries before any child of such deceased member shall have attained the age of eighteen years, then to his child or children under said age divided in such manner as the board of retirement in its discretion shall determine, to continue as a joint and survivor pension until every such child dies or attains the age of eighteen years.

(3.) If there be no widow or child or children under the age of eighteen years surviving such deceased member then to his dependent father and mother and the survivor of them for life.

SECT. 16. Should a member cease to be an employee by resignation or discharge or for any reason other than death or retirement he shall be paid the amount of his accumulated deductions and his membership in the retirement system shall thereupon cease. Should a member while an employee die from any cause other than an accident on account of which a benefit is payable under section 14 of this act, his accumulated deductions shall be paid to his legal representatives.

SECT. 17. Until the first payment on account of any retirement benefit is made the beneficiary or if he be an incompetent then his wife or if he has no wife a conservator may elect to receive in lieu of the pension and annuity provided for in this system lesser pension payable throughout life with the provision that:

Option 1. If he die before he has received in payments the present value of his retirement allowance as it was at the time of his retirement, the balance shall be paid to his legal representatives or to such person having an insurable interest in his life as he, his wife or conservator shall nominate by written designation duly acknowledged and filed with the retirement board; or

Option 2. Upon his death his pension shall be continued throughout the life of and paid to such person having an insurable interest in his life as he, his wife or conservator shall nominate by written designation duly acknowledged and filed with the retirement board at the time of his retirement; or

Option 3. Upon his death one half his pension shall be continued throughout the life of and paid to such person having an insurable interest in his life as he, his wife or conservator shall nominate by written designation duly acknowledged and filed with the retirement board at the time of his retirement.

SECT. 18. There shall be a medical board of three physicians appointed by the trustees of the Boston city hospital on nominations made by the senior medical staff of said hospital, one of whom shall be a surgeon, one a medical practitioner and one a neurologist. The members of this medical board shall be appointed for a term of three years. The compensation of the members of the medical board shall be fixed by the retirement board with the approval of the mayor. The medical board shall arrange for and shall pass upon all medical examinations required under the provisions of this act and shall report in writing to the retirement board its conclusions and recommendations thereon.

SECT. 19. Once each year the retirement board shall require every person under the minimum age for service retirement who was retired for ordinary or accident disability to submit to a medical examination to be made at a place designated by the medical board. Upon the completion of such examination the medical board shall report and certify to the retirement board whether said beneficiary is still incapacitated

physically or mentally for service in the department of the city or county where he was employed and of the rank or rating held by him when retired for disability. If the medical board shall find that the disability for which the member was retired has ceased, or if the member fails to submit to the said examination his pension shall cease. Should the retirement allowance of any disability beneficiary be cancelled the reserve on such retirement allowance in the retirement reserve fund shall be transferred to the pension accumulation fund after first returning to the person whose disability benefits have been cancelled or withdrawn under the provisions of this section that balance of the reserve which was transferred to the retirement reserve fund from the annuity savings fund when the member was retired for disability.

SECT. 20. The retirement board shall prepare and publish an annual report which shall also be printed in the *City Record*, showing the valuation of the assets and liabilities of the funds created by this act and a statement as to the accumulated cash and securities of the funds as certified by the city auditor and city treasurer and shall set forth in such reports such other facts, recommendations and data as may be of value to the members of the retirement system and the city of Boston.

The retirement board shall collect and keep in convenient form such data as shall be necessary for the preparation of the mortality and service tables and for the compilation of such other information as shall be necessary for the actuarial valuation of the assets and liabilities of the system.

In the five-year period beginning with the year 1922 and in every five-year period thereafter the actuary shall make an actuarial investigation into the mortality, service and compensation experience of the members and beneficiaries of the system and shall make a valuation of the assets and liabilities of the funds and taking into account the result of such investigation shall:

(a.) adopt for the system such mortality, service and other tables as shall be deemed necessary and

(b.) certify the rates of contribution payable by the city of Boston under the provisions of this act.

On or before the establishment of the retirement system the actuary shall recommend to the board of retirement appropriate tables for use as a basis for making actuarial calculations preliminary to the preparation of tables based on the

experience of members after the establishment of the system.

By the use of the mortality and service tables which shall be adopted from time to time, the actuary shall prepare annually a valuation of the assets and liabilities of the retirement system for publication in the annual report.

SECT. 21. The retirement board may make such rules and regulations as it may deem necessary to carry out the provisions of this act.

SECT. 22. Pensions and annuities under the provisions of this chapter shall be payable in equal monthly installments.

SECT. 23. The right of a person to a pension, annuity or retirement allowance and the deductions from his salary and their accumulations and the right to the return of his deductions as created under this act are hereby exempted from any state or municipal tax and shall not be subject to executions, attachments by trustee process or otherwise in law or in equity or any other process whatsoever and shall be non-assignable except as specifically provided in this act.

SECT. 24. The retirement board shall ascertain the aggregate amount to be paid by the city of Boston and county of Suffolk under the provisions of this act for each fiscal year and shall submit said amount to the mayor of the city of Boston not later than July first in each year.

SECT. 25. The funds necessary to pay the contributions of the city under this retirement system shall be obtained from funds raised by taxation and shall not be subject to the statutory tax limit of the city for municipal purposes as defined in section 1, chapter 401 of the acts of 1920.

SECT. 26. Any amounts paid or payable under the provisions of the workmen's compensation law to a member or to the dependents of a member on account of death or disability shall be offset against and payable in lieu of any benefits payable out of funds provided by the city of Boston under the provisions of this act on account of the death or disability of the member. If the value of the total commuted benefits under the workmen's compensation law is less than the pension reserve on the benefits otherwise payable from funds provided by the city of Boston under this act, the value of the commuted payments shall be deducted from the pension reserve and such benefits as may be provided by the pension reserve so reduced shall be payable under the provisions of this act.

SECT. 27. No person who was a member of the retirement

system and who receives a retirement allowance under the retirement system shall be paid for any service, except service as juror, rendered by him to the city of Boston or county of Suffolk after the date of the first payment of such retirement allowance.

SECT. 28. The Supreme Judicial Court shall have jurisdiction in equity upon the petition of the retirement board or any interested party to compel the observance and restrain violation of this act and the rules and regulations established hereunder.

SECT. 29. If it is impracticable for the retirement board to determine the length of service or salary, pay or compensation of any member the same shall be estimated by the retirement board.

SECT. 30. Nothing contained in this act shall affect the right or power of the city of Boston or county of Suffolk in regard to demotion, transfer, suspension or discharge of any employee.

SECT. 31. All acts or parts of acts inconsistent herewith are hereby repealed.

COMMUNICATION TO THE MAYOR
in relation to
 THE ACCOUNTANTS EMPLOYED IN AUDITING
 THE ACCOUNTS OF THE TREASURY DE-
 PARTMENT.

BOSTON, April 25, 1921.

HON. ANDREW J. PETERS, *Mayor*:

SIR,— It appears by the public press that a firm of public accountants are now employed to determine what the irregularities are in the Treasury Department leading to the recently uncovered defalcation and when they occurred.

The records of this office show that a member of that firm has been employed by the City Auditor as a certified public accountant for the past four years to make an audit of the treasurer's accounts and cash. The last audit of this certified public accountant was on August 18, 1920. He stated—to quote from his report—“During the past year the accounting affairs of the department have been handled in a most commendable manner.”

It appears to the Finance Commission most inadvisable to have the present examination of the Treasury Department made by a man who has audited this department as a certified public accountant for the past four years and has each year reported that the department was being conducted in a commendable way and that the accounts and cash were correct.

Respectfully submitted,

MICHAEL H. SULLIVAN, *Chairman*,
 COURTNEY GUILD,
 JOHN F. MOORS,
 JAMES M. MORRISON,
 J. WALDO POND.

The Finance Commission.

COMMUNICATION TO THE MAYOR

*in relation to*THE METHOD OF PAYMENT OF THE CITY'S
OBLIGATIONS OUTSTANDING AT THE END
OF THE FISCAL YEAR.

BOSTON, April 26, 1921.HON. ANDREW J. PETERS, *Mayor*:

SIR,—Late in January, 1921, the Finance Commission upon inquiry was informed by the City Auditor that he did not know of any outstanding obligations of the city incurred by the department heads in excess of the appropriations for the fiscal year ending January 31, 1921, and if there were any such obligations he would not know of them until they were ready for payment.

The Finance Commission upon inquiry was informed by the City Treasurer also that he knew of no obligations then outstanding against the city, because the system under which his department was and had been operating called for no knowledge on his part of city obligations entered into by the different departments until the actual time for payment.

It became necessary, therefore, to inquire directly of the department heads whether they had obligated the city beyond the appropriations allowed them for the fiscal year ending January 31, 1921. Accordingly, on February 1 the Finance Commission requested the heads of city departments for the following information:

1. The amount of the department's pay roll for services rendered in the fiscal year then just closed, which was to be paid out of funds in the fiscal year just beginning.

2. The amount represented by bills for goods received or service rendered in the fiscal year just closed, to be paid out of funds appropriated in the new fiscal year.

3. The amount represented by contracts, orders or obligations entered into in behalf of the city by the departments prior to February 1, 1921, which were to be paid out of funds appropriated for the fiscal year beginning February 1, 1921.

The answers to these questions were not received from all departments until the first part of the present month.

Your Honor stated in your message to the City Council on February 7, 1921, that the city departments had unexpended balances amounting to \$370,808. This would indicate that the departments had not expended the full amount of their appropriations for the year. Your Honor also stated that there was a surplus in the city treasury of \$3,817,250.61, which included these unexpended balances. Apparently Your Honor had not been informed at that time that there were any outstanding obligations incurred by the department heads to offset their unexpended balances, or that went beyond their appropriation allowances for the year.

The Finance Commission is now in possession of information, furnished by the department heads themselves, showing that there were outstanding obligations on February 1, 1921, contracted by the heads of departments last year beyond the appropriations allowed them to the amount of \$1,226,601.26, exclusive of pay rolls. In addition, there was paid out of the present fiscal year's funds for employees' services rendered in the last fiscal year the sum of \$635,207.33, making a total of \$1,861,808.59 to be paid out of the appropriations of this year for contracts and obligations entered into last year.

Four city departments overdrew their appropriations in the aggregate sum of \$750,000. Of the thirty-seven departments reporting, nineteen showed overdrafts ranging from \$17.73, the lowest, to \$304,479.65, the highest; eighteen departments did not obligate the city beyond their appropriations.

Section 16 of the charter amendments reads as follows:

No official of said city, except in case of extreme emergency involving the health or safety of the people or their property, shall expend intentionally in any fiscal year any sum in excess of the appropriations duly made in accordance with law, nor involve the city in any contract for the future payment of money in excess of such appropriation, except as provided in section six of this act. Any official who shall violate the provisions of this section shall be punished by imprisonment for not more than one year, or by a fine of not more than one thousand dollars, or both.

The Finance Commission recommends at this time:

1. That Your Honor revise the financial statement published in the beginning of the present fiscal year.
2. That Your Honor amend the budget to conform with the actual financial condition that existed at the beginning of the present year.

Respectfully submitted,

MICHAEL H. SULLIVAN, *Chairman,*
COURTENAY GUILD,

JOHN F. MOORS,

JAMES M. MORRISON,

J. WALDO POND,

The Finance Commission.

SECOND COMMUNICATION TO THE MAYOR
in relation to
THE METHOD OF PAYMENT OF THE CITY'S
OBLIGATIONS OUTSTANDING AT THE END
OF THE FISCAL YEAR.

Boston, May 3, 1921.

HON. ANDREW J. PETERS, *Mayor*:

SIR,— Your Honor's communication to the Finance Commission, dated April 29, was received during a brief absence of the chairman, which caused the delay in replying.

The Finance Commission stated in its report of April 26 that there were outstanding obligations of the city at the beginning of the present year amounting to \$1,861,808.59. Your Honor has failed to point out in your letter to the commission, or in your statement given to the Press, that these figures are incorrect. The request, therefore, in Your Honor's letter that the Finance Commission retract this statement in its report of April 26 is without warrant.

The commission reiterates that the financial condition of the city, as stated by Your Honor in your annual message to the City Council on February 7, 1921, was inaccurate, because you made no reference to the \$1,861,808.59 of liabilities then outstanding. Whether or not these liabilities have been carried over from other years does not, in the opinion of the Finance Commission, change the fact that these liabilities should be shown in a statement purporting to give the true financial condition of the city.

The absence everywhere of any record of these obligations but in the files of the department where they were incurred makes it necessary to apply to the several

departments for the information. When the chief executive fails to ascertain the city's obligations at the beginning of the fiscal year — the only time when it is practicable to obtain them — and does not include such obligations in his statement of the city's financial condition at the beginning of the fiscal year, there is no means of ascertaining any record of these obligations thereafter during the entire fiscal year.

Your Honor suggests that a charge of dishonest practice was conveyed in the report of this commission under date of April 26. Nothing of the kind was intended. The report was a simple statement of the facts obtained from the department heads and was sent to inform Your Honor of the true financial condition of the city.

The Finance Commission repeats the recommendations made in its report to Your Honor on April 26, 1921.

Respectfully submitted,

MICHAEL H. SULLIVAN, *Chairman,*

COURTENAY GUILD,

JOHN F. MOORS,

JAMES M. MORRISON,

J. WALDO POND,

The Finance Commission.

COMMUNICATION TO THE MAYOR

*in relation to*THE ACTION OF THE PARK DEPARTMENT
REGARDING THE USE OF ROOMS AT THE
DOVER STREET BATH HOUSE RENT FREE
BY AN EMPLOYEE OF THAT DEPARTMENT.

BOSTON, May 5, 1921.

HON. ANDREW J. PETERS, *Mayor*:

SIR,—The Finance Commission is in receipt of a letter protesting against the contemplated action of the Park Commissioners in allowing an employee of that department, Mr. Roache, to occupy a suite of five rooms in the top of the Dover Street Bath House without rent therefor. The commission understands that Mr. Roache is the engineer in charge of a heating plant at that bath house. Mr. Roache will not only have the occupancy of the suite free but will be allowed heat and light without charge. These rooms in the bath house were formerly occupied by the sewing women of the department, but since their transfer to the Paris Street Gymnasium the rooms have been unoccupied.

The Finance Commission had occasion a few years ago to make a report upon the occupation of city property without rent by city employees and reported against the practice. As the result of that report Mayor Curley discontinued these privileges.

The Finance Commission believes that Your Honor should have these facts for your consideration before the Park Department grants this privilege to Mr. Roache.

Respectfully submitted,

THE FINANCE COMMISSION,
by MICHAEL H. SULLIVAN,
Chairman.

COMMUNICATION TO THE HOUSE COMMITTEE ON
WAYS AND MEANS

in relation to

THE FOUR BRIDGES OVER THE
CHARLES RIVER.

Boston, May 20, 1921.

*To the Honorable the Committee on Ways and Means on
the part of the House:*

GENTLEMEN,—The Finance Commission has made an examination of the four bridges across the Charles river which it is proposed to rebuild under the provisions of Senate Bill No. 331, and reports as follows:

1. THE WESTERN AVENUE-WATERTOWN BRIDGE.

The total estimated cost of rebuilding this bridge is given in the bill as \$175,000. Of this amount it is proposed that Boston's share shall be directly 35 per cent., or \$61,250. In addition Boston will pay 9 per cent. of the total, amounting to \$15,750, as its share of the amount to be assessed on the metropolitan park district, making a total cost to Boston of \$77,000.

This bridge is a very old one and was rebuilt in its present form in 1892-93. The total length is slightly over 200 feet and the entire length, except about 35 feet on the Boston end, is taken up by the draw span. This draw span is built of iron girders, trussed with iron rods extending over king posts at the center of the span. The portion for about 35 feet at the Boston end is of wooden piles.

The roadway is only 23 feet wide and carries two lines of car tracks. On the north side it has a sidewalk about $5\frac{1}{2}$ feet wide. The wearing surface of both roadway and sidewalk is of spruce plank. The bridge at

the present time is certainly in a deplorable condition, although on account of lack of minor repairs its condition appears much worse than it actually is. The surfacing is badly worn and in one place is entirely broken through, leaving a dangerous hole in the roadway. The draw span settles at the ends when heavy vehicles pass over it.

These defects can be easily remedied by the expenditure of a few hundred dollars for repairing the supports under the end of the draw span and placing a new plank wearing surface on the bridge. With these and a few other repairs there seems to be no reason why the bridge should not perform good service for a number of years. The traffic over this bridge is light and there seems to be no possibility of serious congestion, even with the present narrow roadway.

2. THE WESTERN AVENUE BRIDGE.

The bridge at the other end of Western avenue, connecting Brighton with Cambridge, known as the Western Avenue Bridge, is a pile bridge with a plank roadway 26 feet wide. It also has a sidewalk of plank on the northerly side. The draw span is a double-leaf, wooden span, each leaf 18 feet in length, making a total opening of 36 feet.

The estimated total cost for this bridge is \$275,000. Of this amount Boston would pay directly 35 per cent., or \$96,250. Boston's indirect share on account of metropolitan parks assessments would be approximately 9 per cent. of the total, or \$24,750, making a total cost to Boston of \$121,000.

The roadway of this bridge needs repairs in some places and the tops of the piles under the sides of the bridge appear to be badly decayed in some places. The sidewalks are in comparatively good condition and there is no unusual or alarming vibration of the bridge or draw span during the passage of heavy cars. The traffic over this bridge is even lighter than for the Watertown Bridge previously described, it being apparent

that some of the traffic from Watertown goes to the Harvard square district of Cambridge by way of the river parkway and North Harvard street and the new arch bridge near the Stadium.

As regards the cost of rebuilding the two bridges so far considered, it should be taken into consideration that Western avenue as a traffic thoroughfare is of very little interest to the City of Boston. The larger part of the traffic originates in Watertown and the towns beyond and passes through Western avenue into Cambridge. Part undoubtedly crosses a bridge lower down the river to Boston, the remainder being dispersed through Cambridge to various parts of Middlesex County.

The street should be properly a metropolitan highway and the percentage of cost assessed upon the City of Boston should, in the opinion of the Finance Commission, be less for these bridges than for any bridge crossing the Charles river.

3. THE RIVER STREET-BRIGHTON BRIDGE.

The bridge across the Charles river between Cambridge street in Brighton and River street in Cambridge and known as the River Street-Brighton Bridge is of the same type as the bridge at Western avenue last described. The roadway is somewhat wider, being 32 feet in width. There is also a wooden sidewalk on the northerly side. The piling under the structure appears to be in better condition than for the Western Avenue Bridge and the flooring is also better maintained. Repairs to the flooring are in progress at the present time. The condition of this bridge is better than that of either of those already described and its rebuilding is unnecessary at the present time. The estimated cost to Boston will be the same as for the Western Avenue Bridge, \$121,000.

These three bridges above described do not present conditions calling for rebuilding, as is indicated by Senate Bill 331. Certainly no extraordinary repairs or great expenditure of money would be necessary to keep these bridges in operation for a period of several years.

4. THE ESSEX STREET-BROOKLINE STREET-COTTAGE FARM BRIDGE.

This bridge was officially named the Brookline Street Bridge when rebuilt in 1905, as a part of the work of eliminating the grade crossing of the Boston & Albany Railroad at Essex street. This bridge is commonly known as the Cottage Farm Bridge. On account of the grade crossing the bridge was built at a height at the center point of about 36 feet above the present level of the water in the Charles River Basin. The structure is a combination of wooden piles and steel trestles with a wooden flooring. Although it was apparently intended to be a permanent structure, it was in fact somewhat in the nature of a temporary structure when built. It carries a very heavy pleasure automobile traffic at the present time and is not wide enough to accommodate the traffic. Its weakness for present heavy street cars is shown by the fact that from time to time cars have been obliged to stop running in order that the bridge may be repaired and strengthened.

The Finance Commission believes that the construction of this bridge should be authorized at the present time.

The estimated total cost is \$750,000. Boston's direct share is 25 per cent. of the cost, or \$187,000, and its indirect share on account of metropolitan parks approximately 6 per cent., or \$45,000, making a total expense of \$232,000.

As to the other three bridges further up the river, it would be the part of economy to delay their construction, making such repairs now as are necessary.

SUMMARY OF THE COST TO BOSTON.

Western Avenue-Watertown Bridge	\$77,000
Western Avenue-Cambridge Bridge	121,000
River Street-Brighton Bridge	121,000
Essex Street-Brookline Street-Cottage Farm Bridge,	232,000
<hr/>	
Total cost to Boston	<u>\$551,000</u>

The difference, \$110,000, between the above total of cost and the amount of the total bond issue authorized for Boston is approximately Boston's share of metropolitan park assessment for the purpose, to be paid from taxes.

Attention is called to the provisions of the bill, in secs. 13 and 14 on page 12. In sec. 13 it is provided for the Boston and Watertown Bridge that the Public Works Commissioner of Boston is to be the Boston representative on the commission. In sec. 14, relating to the bridge between Cambridge and Boston, it is provided that the Boston representative shall be an appointee of the Mayor of Boston. In both cases the Boston representative should be the Mayor of Boston or some person appointed by him, otherwise a condition might arise whereby a subordinate of the Mayor of Boston would, as regards the Watertown Bridge, have powers superior to the Mayor, because he would receive his power from this act.

It is also provided in sec. 15 that the cities and towns connected shall maintain and keep in repair those parts of bridges and approaches lying within their territorial limits. This method, as regards the bridge structure, is inadvisable and would be likely to lead at times to difference of opinion regarding methods and materials for maintaining the bridges. It would be better to have each city or town pay one half the cost of maintenance and repair of each bridge wherever these expenditures may be incurred, as is now done for some of the old bridges crossing the Charles river.

Respectfully submitted,

THE FINANCE COMMISSION,

by MICHAEL H. SULLIVAN,

Chairman.

COMMUNICATION TO THE MAYOR AND CITY COUNCIL
in relation to
THE METHOD OF PAYMENT OF OBLIGATIONS
OF THE CITY OUTSTANDING AT THE END
OF THE FISCAL YEAR.

BOSTON, May 27, 1921.

To the Honorable the Mayor and City Council:

GENTLEMEN,—The commission recently sent two reports to the Mayor, one dated April 26 and the other May 3, dealing with certain outstanding liabilities of the city at the beginning of the present fiscal year and not included by the Mayor in the financial statement submitted by him to the City Council on February 7, 1921.

These liabilities do not appear to have been considered by either the Mayor or the City Council when preparing and approving the segregated budget for this year.

The present auditing system of the city at the beginning of the fiscal year ignores the fact that obligations included in the previous year remain unpaid. When a bill is received at the auditor's office no inquiry is made as to when it was incurred. Any department that spends in excess of its appropriations has only to hold back the bills for such excess until the beginning of the new fiscal year, when they will be approved in the auditor's office and paid out of the appropriations for the new fiscal year. It is therefore impossible to find out under this practice whether the following section (16) of the charter amendments is violated.

SECTION 16. No official of said city, except in case of extreme emergency involving the health or safety of the people or their property, shall expend intentionally in any fiscal year

any sum in excess of the appropriations duly made in accordance with law, nor involve the city in any contract for the future payment of money in excess of such appropriation, except as provided in section six of this act. Any official who shall violate the provisions of this section shall be punished by imprisonment for not more than one year, or by a fine of not more than one thousand dollars, or both.

Unless the city's auditing system furnishes the necessary information to determine whether the unpaid bills of any department at the end of the fiscal year are in excess of the balance of the appropriations which that department returns to the treasury, this section of the charter amendments above quoted is nullified.

The segregated budget system was used for the first time in the fiscal year of 1916-17. The special commission appointed by the Mayor that recommended the adoption of the segregated budget system was authorized by the City Council and Mayor in June, 1915. The chairman of that special commission was former Mayor Nathan Matthews. This special commission recommended the present segregated budget system because, among other things, it would tend "to a greater economy in appropriation and a greater efficiency and accountability in expenditure."

The Finance Commission believes that the segregated budget system has not accomplished as much as it should, because the practice has continued of approving and paying obligations of the city regardless of the fiscal year in which they were incurred. For example, last year there was appropriated for one department the sum of \$38,000 for fuel. The sum of \$45,000, however, was actually paid, the additional \$7,000 having been transferred from other items in the department's budget to the item for fuel. When the budget for this year was being made up this department estimated \$59,000 for fuel for the present year. The Finance Commission challenged this estimate on the ground that the estimated fuel needed at the then going prices would not exceed \$43,500, and would probably be less

as the price of fuel was then falling. It now appears that this department had purchased fuel last year to the amount of \$14,000 over and above the \$45,000 actually paid for, and thus at the beginning of the present fiscal year carried over a liability for fuel in the sum of \$14,000. This item of \$14,000 did not appear in the budget and, so far as can be learned, was not known outside of the department that incurred it, but under the present auditing system it has been approved and paid out of this year's appropriation. If it was necessary for this department to expend \$59,000 last year in the purchase of fuel, with an appropriation of only \$38,000, this fact should have been disclosed this year to the Mayor and City Council. Not only was this debt not disclosed, but this department was reported by the auditor as having an unexpended balance of several thousand dollars at the end of the year.

The very fact that a department shows a balance to its credit at the end of the year implies that all its bills for the year have been paid. This, however, is not true. Another department showed a balance at the end of the year of \$6,544.05, but did not show obligations of over \$300,000 carried over to this year. This practice extends in the same way to each item of the budget in every department. A small unexpended balance is shown on a particular item, while large obligations against the same item are outstanding but undisclosed. For example:

The auditor reported one department last year as having an unexpended balance in its budget under the item of "Tools and instruments" of 26 cents, while the department had undisclosed obligations against this item of \$4,295.61. Another item showed a cash balance last year of 35 cents, but did not disclose obligations of \$4,064.62. These instances could be multiplied and are typical of most of the departments of the city.

Under this system hundreds of thousands of dollars are expended by the departments between one budget and the next and escape consideration by either the

Mayor or the City Council. There is now no practical means by which the appropriating officials may know whether a department has either exceeded its appropriation or has bills to be paid out of the appropriation for the following year. Of course the bills incurred in any fiscal year for the purposes of that year cannot all be paid before the end of that fiscal year. Payment of some bills must necessarily be made in the new fiscal year, but these bills in any department should not exceed the unexpended balance returned to the treasury by that department.

The Finance Commission recommends:

1. That the Mayor by an executive order to the heads of departments call attention to sec. 16 of the charter amendments, and instruct them to comply with the provisions of this section during the present fiscal year.

2. That the City Council withhold its approval of any supplementary budget proposed for the present fiscal year for any department without a full disclosure of the liabilities carried over from last year by that department in excess of the balance of appropriations to its credit at the end of the last fiscal year.

Respectfully submitted,

MICHAEL H. SULLIVAN, *Chairman*,
COURTENAY GUILD,

JOHN F. MOORS,

JAMES M. MORRISON,

J. WALDO POND,

The Finance Commission.

SECOND COMMUNICATION TO THE MAYOR
in relation to
THE PURCHASE OF CRUSHED STONE BY THE
SUPPLY DEPARTMENT.

Boston, June 3, 1921.

HON ANDREW J. PETERS, *Mayor*:

SIR,— The Finance Commission sent a report to Your Honor on March 5, 1921, on the method used by the Public Works Department in purchasing crushed stone for constructing and resurfacing city streets.

One of the recommendations in that report was that the specifications should provide certain definite tests for hardness, toughness and abrasion, to which all the stone purchased for street construction should be submitted. The specification prepared by the Public Works Department under which crushed stone is being furnished this year provides for

Hard, tough, dense, broken stone, trap or Roxbury conglomerate of these qualities, free from round or ill-shaped stones, dirt or other objectionable materials,

but does not specify the degree of these qualities or any definite tests to determine these qualities.

Whether any crushed stone furnished the city is in accordance with this specification is left to the judgment of the Commissioner of Public Works. It is difficult to see how the commissioner can exercise his discretion under the above specification except in the most arbitrary way, resulting either in loss to the city or unfairness to the contractors.

Although there is sufficient apparatus available to make the necessary tests of the wearing quality and toughness of crushed stone, the Public Works Department

has not supplied itself with this apparatus and, as far as can be learned, is making no effort to test the wearing quality and toughness of crushed stone purchased.

The Finance Commission has had samples from each of eleven stone quarries within the City of Boston, from which is taken most of the stone used by the city, tested in the laboratory of the Bureau of Public Roads of the Department of Agriculture, Washington, D. C. These tests show that the quality of stone from some of these quarries is below the minimum standard recommended by the national government for bituminous macadam and bituminous concrete roads.

Much of the crushed stone that has been furnished the City of Boston under its contracts for this year's supply was taken from those quarries that are below the minimum standard of quality set by the national government. This inferior quality of stone has been used in city work apparently with the assent of responsible officials of the Public Works Department, and in some cases after a protest by subordinate officials that the stone was unsuitable for street construction.

The crushed stone purchased under the specification and methods described above is used for the most part by the employees of the Public Works Department in repairing and resurfacing city streets. Miles of city streets are repaired and remade each year by this force. This work furnishes an excellent opportunity for the Public Works Department to set a high standard of street repair and street construction. This department has direct and entire control of the work. The quality of materials and workmanship is wholly and solely in the hands of the department. There can be no reason for not giving the city the very best street construction obtainable. Yet unfortunately most of the repairing and resurfacing done by the Public Works Department directly not only are not of the best quality or the highest standard, but are generally inferior to that done under contract.

The Finance Commission recommends:

1. That the Public Works Department establish a definite standard for crushed stone to be used in bituminous macadam and bituminous concrete street surfaces.

2. That the Public Works Department provide in its laboratory the necessary apparatus to make proper tests of crushed stone to determine its hardness, toughness and abrasion.

Respectfully submitted,

MICHAEL H. SULLIVAN, *Chairman,*

COURTENAY GUILD,

JOHN F. MOORS,

JAMES M. MORRISON,

J. WALDO POND,

The Finance Commission.

COMMUNICATION TO THE MAYOR
in relation to
THE TEAMING CONTRACT OF THE
PARK DEPARTMENT.

BOSTON, June 4, 1921.

HON. ANDREW J. PETERS, *Mayor*:

SIR,—The Park Department received bids on April 15, 1921, for furnishing single and double teams for the present year. The specifications called for furnishing for a period of one year approximately twelve double teams with dump carts and five single team express wagons each day. Bids were received as follows:

BIDDER.	TEAMS.*	
	Double.	Single.
P. O'Riorden Company	\$7 30	\$3 20
M. McGinnis & Co.	7 00	2 00
John Kelly Company	6 75	3 00
Fred H. Webster	6 65	3 35

* Per day.

The method followed by the Park Commission in determining the lowest bidder was to multiply the number of each class of teams by the price bid per day and to compare the bids on the basis of this total, as follows:

BIDDER.	Bids.	Total.
M. McGinnis & Co.: 12 double teams at \$7.....	\$84 00	\$94 00
5 single teams at \$2.....	10 00	
John Kelly Company: 12 double teams at \$6.75.....	\$81 00	96 00
5 single teams at \$3.....	15 00	
Fred H. Webster: 12 double teams at \$6.65.....	\$79 80	96 55
5 single teams at \$3.35.....	16 75	
P. O'Riorden Company: 12 double teams at \$7.30.....	\$87 60	103 60
5 single teams at \$3.20.....	16 00	

By this method it was determined that M. McGinnis & Co. was the lowest bidder. There is no objection to this method. But the bid of M. McGinnis & Co. of \$2 a day for furnishing a horse and express wagon with a driver obviously would involve a loss to the contractor. No plainer example of unbalanced bidding has been brought to the attention of the Finance Commission. In fact, all of the bidders seem in this respect to have submitted unbalanced bids. The fact that it is more marked in the case of M. McGinnis & Co. may be due to the knowledge which that company had that it would not be called upon to furnish the number of single teams called for by the Park Commission in the advertisement.

This company has had teaming contracts with the Park Department since February 1, 1918, and its knowledge of the number of single teams required no doubt gave it an advantage in making its bid. The bills of M. McGinnis & Co. on file in the City Auditor's office for the fiscal year 1920-21 show double teams employed for a total of 4,190½ days and single teams for 590 days, a ratio of 1 to 7.1, instead of 1 to 2.4, as estimated by the Park Commission in requesting the bids under discussion. If the Park Commission took as a basis the total number of teams actually used last year, the bid of Fred H. Webster is lower than the bid of M. McGinnis & Co. by the sum of \$2,529.92. If twelve double teams are to be furnished not more than two single teams should be required, according to the experience of last year. In any event it is clear that the bid of M. McGinnis & Co. is so unbalanced that it should be rejected, even if it were the lowest bid.

The commission desires to call Your Honor's attention at this time also to the fact that last year M. McGinnis & Co. was awarded the contract for furnishing teams and in addition was allowed without competition to furnish trucks for a whole year, the bills for which in the summer months ranged from \$500 to \$900 per month. There appears to be no reason why the furnishing of these trucks should not also be open to competition.

Furthermore, it appears from an examination of bills in the auditor's office that M. McGinnis & Co. furnished two driving horses to the Park Department last year at \$1 per day each, the Park Department boarding and maintaining the horses. The total paid for these two horses for one year was sufficient to have purchased two horses suitable for driving purposes.

An examination of the bills also discloses that M. McGinnis & Co. without competition furnished the Park Department last year with large quantities of structural material, cinders and manure.

The Finance Commission recommends:

1. As regards bids already received, one of the following alternative courses of procedure:

- (a.) That the contract for the fiscal year 1921-22 be awarded to Fred H. Webster, or

- (b.) That all bids be rejected and new bids advertised for on the basis of single and double teams used last year, or

- (c.) That the award be divided, the contract for single teams to M. McGinnis & Co. at \$2 per day and the double teams to Fred H. Webster at \$6.65 per day, the lowest bidders, respectively.

2. That competitive bids be secured for furnishing auto trucks.

3. That driving horses for the needs of the department be purchased and not hired.

Respectfully submitted,

MICHAEL H. SULLIVAN, *Chairman,*

COURTENAY GUILD,

JOHN F. MOORS,

JAMES M. MORRISON,

J. WALDO POND,

The Finance Commission.

COMMUNICATION TO THE MAYOR
in relation to
THE ADVERTISING BY THE SCHOOLHOUSE
DEPARTMENT IN OTHER NEWSPAPERS
THAN THE CITY RECORD.

Boston, June 6, 1921.

HON. ANDREW J. PETERS, *Mayor*:

SIR,— The *City Record* is published under the authority contained in sec. 29 of the Charter Amendments of 1909, for the purpose of giving more effective publicity to such notices as the city departments are required to publish and to put an end to the practice of advertising all sorts of city business, whether required by law or not, in the daily and weekly papers at great expense to the city.

This section of the charter amendments also provides that

All advertising, whether required by law or not, with reference to the purchase or taking of land, contracts for work-materials or supplies, the sale of bonds, or the sale of property for nonpayment of taxes shall appear *exclusively* in said paper.

It is difficult for the Finance Commission to believe that any department head of the city is unaware of this provision of the city charter, yet the Schoolhouse Commission, in violation of the provisions of this section of the charter, has published notices in the Press of the city within the past two months. The City Auditor has approved bills for such publications and they have been paid.

It appears that after some of these bills had been paid the City Auditor requested an opinion from the Corporation Counsel on the legality of the matter and was informed that such advertising was illegal.

The auditor thereupon notified the Schoolhouse Department that the practice of advertising for bids in the newspapers of Boston was illegal, but that he would approve all bills already incurred. Why the City Auditor should approve for payment an illegal bill, because it has been actually incurred, is not clear.

The Finance Commission recommends:

1. That Your Honor issue an executive order to the heads of departments, requesting them to comply strictly with sec. 29 of the charter amendments.
2. That the City Auditor be ordered not to approve for payment any bill for such advertising.

Respectfully submitted,

MICHAEL H. SULLIVAN, *Chairman*,
COURTENAY GUILD,
JOHN F. MOORS,
JAMES M. MORRISON,
J. WALDO POND,

The Finance Commission.

COMMUNICATION TO THE MAYOR
in relation to
THE CARRYING OUT OF THE CONTRACT FOR
BUILDING A FENCE AROUND THE BALL
FIELD ON BOSTON COMMON.

BOSTON, June 8, 1921.

HON. ANDREW J. PETERS, *Mayor*:

SIR,— On April 8, 1921, the Park Department awarded a contract for building a fence around the ball field on Boston Common to the W. A. Snow Iron Works, Inc., the second lowest bidder. The lowest bidder was the firm of B. Krivitsky & Co. The chairman of the Park Department stated that the award was not made to the lowest bidder because of the delay experienced by the department with that firm last year under a contract for building a fence around the Randolph Street playground, and because "the contract for the fence on Boston Common playground was too important to be delayed."

This contract for the Boston Common playground fence called for:

1. Concrete foundation piers at least 18 inches in diameter and 4 feet deep, to be finished off smoothly 2 inches above the ground, and with steel rings 12 inches in diameter and $\frac{1}{2}$ inch thick set 2 inches below the top of the concrete foundation.
2. Posts to be of wrought-iron pipe, $9\frac{1}{2}$ feet in length, set $3\frac{1}{2}$ feet in the concrete piers.
3. Wire fabric to be fastened to the posts with galvanized bolts.
4. The fence to be given three coats of paint.
5. The tops of the posts to be finished with caps of malleable iron.

None of these specifications have been fully complied with.

1. The concrete piers for the posts — a very important part of the structure — are only 12 inches in diameter, instead of 18 inches as required, and are set in the ground $2\frac{1}{2}$ feet instead of 4 feet as required. The steel rings for reinforcing the concrete piers, to be set 2 inches from the top of the piers, were not furnished at all. Nor are the piers finished smoothly 2 inches above the grade of the ground at the posts and sloped to the ground level. The neglect to finish the top of the piers as required will subject the posts to corrosion on account of water and ground acids and thus shorten the life of the fence.

2. The posts are steel and not wrought iron as specified. They are $8\frac{1}{2}$ feet in length instead of $9\frac{1}{2}$, as required by the contract, and are set 2 to $2\frac{1}{2}$ feet into the concrete piers instead of $3\frac{1}{2}$ feet as specified. The wrought iron specified costs about 40 per cent. more than the steel actually furnished.

3. Ordinary bolts, untreated to resist weather conditions, have been used to fasten the fence to the posts, instead of the galvanized bolts called for by the contract.

4. Only two coats of paint have been applied to the fence, instead of three as required by the contract.

5. The contract called for finishing the tops of the posts with caps of malleable iron. The contractor used cast iron, which costs about one half as much as the malleable iron called for by the contract.

There was an inspector of the Park Department assigned to this work, the work of concreting the bed of the pond on the Common, and the building of some sidewalks, also on the Common, all three contracts being carried on at the same time. Mr. T. A. Snow of the contracting company stated that the engineer of the Park Department, who prepared the specifications, and Mr. Long, deputy commissioner, visited the work practically every day. He also stated that the chairman of the Park Commission was about the work frequently.

The consulting engineer of the Finance Commission estimates that the contractor saved at least 25 per cent.

of the entire contract price of \$4,000 by not complying with the specifications. This saving, however, does not measure the damage to the city, for the reason that the departures from the specifications are of such a serious nature that the durability and life of the fence are probably reduced by a very much greater proportion of the entire contract price than was saved by the contractor.

The important point to emphasize in this matter is the gross neglect of the engineer and inspector of the Park Department in permitting such vital departures from the specifications. In view of the testimony of the engineer of the Park Department that the inspector assigned to the work was on the ground every day, the Finance Commission cannot escape the conviction that the inspector deliberately approved the improper construction of this fence.

This is a good example of how the greatest care of a city department in preparing plans, specifications and the accompanying contract to protect the interests of the city can be wholly nullified by inefficient inspection. It would seem that a contractor would, on honor alone, more nearly comply with the specifications and plans of a contract of this kind than has proved to be the fact in this case under city inspection.

The Finance Commission recommends:

1. That payment under this contract be withheld until the damage to the city is ascertained and that the ascertained damage be deducted from the amount of the contract.
2. That the inspector assigned to this work by the Park Department be discharged.

Respectfully submitted,

MICHAEL H. SULLIVAN, *Chairman.*
 COURTENAY GUILD,
 JOHN F. MOORS,
 JAMES M. MORRISON,
 J. WALDO POND.

The Finance Commission.

COMMUNICATION TO THE MAYOR
in relation to
OPENINGS IN THE CITY'S STREETS BY PUBLIC
SERVICE CORPORATIONS.

BOSTON, June 28, 1921.

HON. ANDREW J. PETERS, *Mayor*:

SIR,—From time to time complaints have been received by the Finance Commission from citizens that many of the street openings made annually by public service corporations and others, under permits from the Public Works Department, are not properly repaired when the purpose of the openings has been accomplished, and that as a result many well built streets are rough and uneven. Recently the Finance Commission granted a hearing to the officers of the United Improvement Association on this matter and thereafter investigated the whole question of street openings and restoration.

It appears from a letter of Your Honor to the secretary of the United Improvement Association, under date of May 4, 1921, that the matter of restoring street openings to the condition obtaining when they were made is the duty of the persons or public service corporations making the openings. The following paragraph is taken from Your Honor's letter above mentioned:

While I understand perfectly your purpose in calling these openings to my attention, I think I should again state that the public service corporations making openings are alone responsible for their repavement. We are doing everything possible to secure the co-operation of such corporations, and I think it would be a good plan if the United Improvement Association aided us by communicating on such matters direct with the corporations making the openings.

The matter of requiring more adequate financial returns and better security from corporations and others making openings in the public streets was considered by the Finance Commission in 1909. (See Finance Commission's Reports, Vol. V., pp. 23 and 29.) The study made at that time resulted in the passage of ch. 553 of the Acts of 1910. This act provides the conditions under which parties may receive permits for opening public highways. The essential portions relating to the matters now under consideration are as follows:

SECTION 1. The superintendent of streets of the city of Boston may require any person or corporation applying for a permit to open streets or sidewalks in said city to deposit with the city treasurer, in addition to a bond to protect the city against suits for damages to persons or property, cash, or if the applicant prefers, such securities as savings banks in Massachusetts are permitted by law to invest in, and may withhold such permit, except an emergency permit, until the deposit is made. Such deposit shall be for an amount which the superintendent of streets, subject to the approval of the mayor, determines to be sufficient to restore the street or sidewalk to an order and condition as good as obtained prior to the opening, but the total amount on deposit by any person or corporation at any time shall not be in excess of five thousand dollars, and if the deposit of any person or corporation at any time amounts to five thousand dollars no further deposit shall be required as a condition of the granting of a permit until the lawful deduction from said deposit shall be made by the city as hereinafter provided.

SECT. 2. If within two years from the date of the restoration of the street or sidewalk which has been opened by a person or corporation under a permit granted as provided in the preceding section, the superintendent of streets, by written notice, orders such person or corporation to make further repairs, and said person or corporation neglects for a period exceeding thirty days to comply with such order, the city may remedy the defects due to the manner in which said street or sidewalk was opened and restored, and the superintendent of streets may, after giving said person or corporation seven days' notice

in writing of his intended action, deduct the reasonable cost thereof from the amount of the deposit of such person or corporation, and the city treasurer shall place the amount so deducted to the credit of the appropriation for the street department for the current year.

Ch. 28 of the Revised Ordinances of 1914 contains the procedure for operations under this law. Sec. 9 of said chapter is as follows:

SECT. 9. The commissioner may issue permits to persons having authority in the premises to open, occupy, obstruct and use portions of the streets. Such permits shall specify the time, place, size and use of such opening, occupation or obstruction, and shall be granted upon condition, . . .

1. That the restoration of the paving or other surface of such streets shall be effected by the city as directed by the commissioner, the work to be done by city employees or by contract or otherwise at his discretion, the standard, type and extent of the repairs necessary to effect such restoration to be determined by him and to be paid for by the person receiving the permit, such payment to be made in advance on the basis of the commissioner's estimate or during the progress or after the completion of the restoration as the commissioner may elect.

3. That the commissioner may detail an inspector, at the expense of the person receiving the permit, to supervise said opening, occupation and use, and to see that the backfilling is properly done.

Under the foregoing law and ordinance the present practice is to require a person or corporation who is permitted to make an opening in a public street to file a bond with the city authorities for the protection of the city, in the sum of \$1,000. These bonds run for a period of one year and are renewable each year. In addition to the bond, all parties — with the exception of certain public service corporations — are required to make cash deposits sufficient to cover the estimated cost of the repair work, as provided in the statute.

The street surface is restored temporarily by the parties making the opening and maintained in a safe condition until such time as the disturbed underlying soil has become properly compacted by settlement. The final resurfacing is made either by employees of the city or by some contractor designated by the Public Works Department, except in certain instances where extensive work has been performed by public service corporations the resurfacing is done directly by contractors employed by the corporations, and also excepting the Boston Consolidated Gas Company, which does a large part of its work of restoring the city's pavements with its own day labor force.

The charges made by the city for work done by its day labor force and by contractors designated by the city to restore street pavements are according to certain established rates and sufficiently generous.

Inspectors are detailed by the Public Works Department for the specific purpose of watching the openings and seeing that the resurfacing is performed in a satisfactory and workmanlike manner. As regards public service corporations, special inspectors are detailed and their salaries are charged to the corporations and paid by them.

From the foregoing it seems clear that the responsibility for restoring and repairing such openings belongs fully and solely to the city, with ample provision for reimbursement by the party or corporation permitted to make such openings. There appears to be no reason under the law, the ordinance and the practice of the Public Works Department why any opening made in a public street should remain improperly restored for public use immediately after the purpose of the opening is accomplished, nor does there appear to be any reason for not restoring such an opening at the proper time to its normal and permanent condition.

In the large area of street surface that has been paved in recent years with granite block many openings have been made by public service corporations or by

departments of the city, particularly in the streets along the waterfront. The surface of these openings, however, has not been restored to such condition as it should have been. In order to do a neat and workmanlike job and prevent disturbed areas of pavement of this sort being noticeable as compared with surrounding areas, it is necessary that all the broken blocks be removed, that the pavement be grouted in the same manner as when originally laid and that the cement grout be allowed to harden for a sufficient time, so that it will not be removed by the impact of horses' feet and wheels with iron tires.

As a matter of fact there appears to be no attempt by the city authorities to secure such work, except in particular cases. As an example of such an exception, a large number of openings have been made in School and Sudbury streets, and the surface so restored that the openings are not perceptible at the present time. On the other hand, in such streets as Atlantic avenue, where upwards of 150 permits for openings have been granted since repaving in 1919, little attempt has been made to remove the old and broken pavement, with the result that a so-called straight joint extends around the edges of many openings and no support is furnished to the restored pavement from the surrounding pavement. This joint is rapidly worn away by iron tires and causes a hole in the street. Traffic is allowed almost immediately over the opening after the blocks have been grouted, whereas a minimum of seven days is required for new pavement, and more if possible.

Until the department charged with this work requires parties restoring pavements to do it in a workmanlike manner, whatever may be the expense, there will still be uneven patches on our granite block paved streets.

There are many cases where street openings have apparently been neglected and require immediate repairs. By far the greater part of such openings are apparently due to the operation of the Water Service

of the City of Boston, either in repairing the general service pipes or on account of the work of the high pressure fire service.

The Finance Commission recommends:

1. That the Commissioner of Public Works make an examination of all streets where permits have been granted to any person or corporation to make openings.
2. That after such examination all openings found not to have been restored to their original condition as regards street surface be so restored as soon as possible.

Respectfully submitted,

MICHAEL H. SULLIVAN, *Chairman,*

COURTENAY GUILD,

JOHN F. MOORS,

JAMES M. MORRISON,

J. WALDO POND,

The Finance Commission.

COMMUNICATION TO THE MAYOR
in relation to
THE NEEDS OF THE CITY DEPARTMENTS FOR
MOTOR SERVICE.

BOSTON, June 29, 1921.

HON. ANDREW J. PETERS, *Mayor*:

SIR,— Your Honor on April 28, 1921, requested the Finance Commission to report on the needs of the city departments for motor service, both passenger and truck, and the advisability of adopting a standard vehicle for each service. After making a study of the needs of the city departments for passenger car service and the defects of the present system, the Finance Commission makes the following report:

Two reports on the subject of city motor service have been heretofore made by the Finance Commission. The first was made in 1912 (see Finance Commission's Reports, Vol. VIII., p. 104) and dealt with the purchase of motor fire apparatus for the Fire Department.

The second report was made in 1915 (see Finance Commission's Reports, Vol. XI., p. 353) and dealt with the use of passenger automobiles by the city departments, and recommended the adoption of a taxicab or livery system, based on the city's ownership of the automobiles.

At the present time the city owns 74 passenger cars which are used by the departments other than the Police, Fire and Hospital services. This list does not include motor trucks. These passenger automobiles cost the city when purchased the sum of \$77,929.63. New passenger cars each year cost the city on an average \$15,000.

Of these passenger cars, 24 are touring cars, 4 are

limousines or sedans, and 46 are runabouts or roadsters. Of the 24 touring cars, 21 are assigned either to the heads of the city departments or to the heads of divisions. These cars are used exclusively by the persons to whom they are assigned, although on rare occasions they may be used by other members of the staff of the department. The other three touring cars are used by employees supervising the work of the subordinates of the department and are not assigned to the head of the office. Two of the 4 closed cars are used continuously, either for inspection purposes by division chiefs or by the office force. One other closed car is used by the Institutions Department, and the fourth, a Buick sedan, is assigned to the chairman of the Park Department and is kept at the city buildings in Franklin Park. The Park Department chairman has, in addition to this closed car, a Stearns-Knight touring car.

The 46 runabouts and roadsters are used daily by the inspection force of the city and by engineers for inspection work.

During the present year (1921-22) 26 chauffeurs are employed and assigned to heads of departments or heads of divisions to operate passenger cars. The salaries of these chauffeurs amount to approximately \$33,000.

It is impossible to state exactly the total cost of passenger motor service to the city, because the city's auditing system is so arranged that the total cost for motor vehicle transportation of all kinds is shown in one sum by departments. No separation is made of the cost by car or type of car, or by truck service or passenger service. The total cost to the city last year for automobile service, exclusive of the Fire, Police and Hospital services, was approximately \$209,000. This figure includes trucks as well as passenger automobiles.

This large expenditure is not warranted by the service rendered. It is mainly due to three causes:

1. The assignment of cars to individuals, with the result that for long periods at a time the cars are standing idle outside of City Hall or elsewhere, while officials

in other departments needing motor service are obliged to hire it at the city's expense.

2. The too frequent replacement of old cars with new cars.

3. The purchase of touring cars to serve where runabouts only are necessary.

It is a common custom for heads of departments to have chauffeurs call for them at their homes in the morning and take them to City Hall, where the cars remain on the call of the head of the department. While the head of the department is in his office the chauffeur and the car are idle, regardless of the need for automobile service in any other department. In the evening many of these cars are used to carry home not only the officials to whom they are assigned but others.

The city of Chicago a few years ago investigated the use of city automobiles and, as a result, Chicago sold its passenger car equipment and contracted for automobile service with a private company at a per hour rate. At the present time Chicago is paying \$3 an hour for such service, and its automobile cost for passenger service for the year 1920 was about \$30,000. The City of Boston, although less than one half the size of Chicago, pays more than that sum annually for chauffeur's salaries alone.

It seems clear to the Finance Commission that the city will save many thousands of dollars annually if the contract system of hiring its passenger motor service is adopted.

Taxicab and automobile companies now operating in Boston have informed the commission that they are equipped to furnish all the passenger automobile services needed in the city departments and are prepared to bid for this work.

The Finance Commission recognizes that there are certain divisions of the city service in which a runabout motor car may be necessary. For such service the city probably should maintain a few such cars, but these cars should not be larger than a runabout type and should be operated by the officials using them.

It is entirely possible, and very desirable, that whatever departments of the city have automobiles should keep a detailed account of the expense. At the present time, although the city has been using automobiles for fifteen or more years, there are no records that aid in the distribution of cost and maintenance, outside of the School Committee department. The following record of a roadster automobile used by the schoolhouse custodian is given to show the desirability of such records, not only as a monthly and yearly check for the head of a department, but as a cumulative record for application to types of cars and comparison of service by departments. The following record can be found on page 46 of the annual report of the business agent of the School Committee for the fiscal year ending January 31, 1919:

COST OF SCHOOLHOUSE CUSTODIAN'S AUTOMOBILE.

An automobile (roadster) was purchased in December, 1914, and was in use three years, nine months and nine days. It has recently been exchanged for a new machine. The following statement shows the total cost, the average yearly cost, including depreciation, the depreciation per year and the cost per mile:

Original cost, equipped complete	\$1,085 00
Tires and tire repairs (including inner tubes)	532 91
Gasolene	488 97
Lubricants	29 00
Miscellaneous parts and repairs (including overhauling, etc.)	641 84
Oxygen	22 62
Washing and polishing	27 25
Registration fees	30 00
Licenses	2 50
Incidentals	33 56
Garage charges	3 75
Electric light for garage	36 75
<hr/>	
Total cost for three years, nine months, nine days	\$2,934 15
Allowance for old machine	250 00
<hr/>	
Net cost, including depreciation	<u>\$2,684 15</u>

Length of time in service, three years, nine months, nine days.

Total miles run, 31,000.

Average cost per year, including depreciation, \$711.03.

Depreciation per year, 20.3 per cent.

Cost per mile, \$0.087.

The commission requests further time for its report on motor trucks for use of the city.

The Finance Commission recommends:

1. That the Superintendent of Supplies advertise for passenger car service for the city on both an hourly and a monthly basis, for both open and closed cases.

2. That such rental service as may be obtained as a result of bids received be applied as far as possible to every passenger motor service required by the city.

3. That no more passenger cars be purchased by the city for any department until the result of advertising for rental bids is known.

4. That, if and when the passenger motor service of the city departments is put upon a rental basis, the Superintendent of Supplies be authorized to maintain a service through which all orders for hire of automobiles shall pass and be filled.

Respectfully submitted,

MICHAEL H. SULLIVAN, *Chairman,*

COURTENAY GUILD,

JOHN F. MOORS,

JAMES M. MORRISON,

J. WALDO POND.

The Finance Commission.

COMMUNICATION TO THE MAYOR
in relation to
THE AWARD OF A CONTRACT FOR ELECTRIC,
GAS AND AIR SYSTEMS IN THE NEW PUBLIC
LATIN SCHOOL.

BOSTON, July 7, 1921.

HON. ANDREW J. PETERS, *Mayor*:

SIR,— The Finance Commission is in receipt of a communication from Your Honor of June 2, requesting the opinion of the commission on the award of a contract for installing electric, gas and air systems in the new Public Latin School to the second lowest bidder, the M. B. Foster Electric Company. Since the receipt of Your Honor's letter the Schoolhouse Commission has awarded the contract to the lowest bidder.

There were six bidders for this contract, the M. B. Foster Company being the second lowest bidder at \$44,965 and the Connor Electric Company the lowest at \$43,696.

One of the requirements in the proposal for bids for this work was that the subcontractors should be named for the different parts of the work. The purpose of the Schoolhouse Commissioners in having the subcontractors designated was:

1. In order that the commissioners may pass upon the ability of the subcontractors to do the work, and
2. To make sure that the general contractor had received bids or made contracts in good faith with subcontractors, preparatory to the award being made on the general contract; because if it were otherwise the successful bidder for the general work would be able to auction or "peddle out," as it is called in the trade, the various subcontracts.

The commissioners seek to stop such practices and to retain their power and control over all who have any work or contract to perform for the department. This seems a wise precaution.

In the present case the Connor Company in four instances named the subcontractors for the same subcontract. The two contractors were not to perform the work jointly (except the motors and generators), but one of them was to be selected by the Schoolhouse Department to do the work. The four instances where two sub-bidders were designated were as follows:

Lighting fixtures.....	E. H. Tarbell Company or N. W. T. Knott.
* Motors and generators.....	Western Electric Company and Holtzer-Cabot Company.
Clocks and bells.....	Standard Electric Time Company or Seth Thomas Company.
Passenger elevator.....	Portland Elevator Company or F. S. Payne Company.

In the other items only one subcontractor was named for each subcontract.

The requirement of the proposal, however, did not limit the number of sub-bidders to one only, although the Finance Commission is informed that the intent of the Schoolhouse Department was to require the naming of but one subcontractor. The language of the proposal, however, does not make this intent clear.

The Finance Commission believes, therefore, that the action of the contractor in submitting more than one sub-bidder on single items was in conformity with the language of the proposal and that the Connor Electric Company is the lowest bidder under the competition complying with all the conditions of the proposal.

The Finance Commission recommends:

1. That the language of future proposals be made more definite by requiring the submission of only one sub-bidder on each item.
2. That the contract for installing the air, electric and gas systems in the new building for the Public Latin School be awarded to the Connor Electric Company.

Respectfully submitted,

THE FINANCE COMMISSION,
by MICHAEL H. SULLIVAN,
Chairman.

COMMUNICATION TO THE MAYOR

*in relation to*THE AWARD OF A CONTRACT FOR ERECTING
AND COMPLETING CERTAIN PORTIONS
OF AN ELEMENTARY SCHOOLHOUSE IN
THE SAMUEL ADAMS DISTRICT.

BOSTON, July 15, 1921.HON. ANDREW J. PETERS, *Mayor*:

SIR,— In response to your letter of June 29, regarding the award of a contract to John Bowen Company for erecting and completing certain portions of an elementary school in the Samuel Adams District, the commission reports as follows:

It appears from evidence that was presented to the commission that neither Your Honor nor the awarding board, namely, the Schoolhouse Commission, have ever passed on the responsibility of the lowest bidders, Langan & Shaw.

The Finance Commission hesitates to report on an executive matter before the executive charged with the duty has first acted.

The Finance Commission believes that the lowest responsible bidder should receive the award in all contracts where bids are publicly called for. In the present case the Schoolhouse Department has not indicated why the award was not made to the lowest bidders.

The Finance Commission believes that the Schoolhouse Commissioners, upon whom rests in the first instance the duty of either awarding to the lowest responsible bidders or giving adequate reasons why the award should not be made to the lowest responsible bidders, should make a decision in this case. All that the Schoolhouse Department states is that "the best

interests of the city will be served in awarding this contract to the John Bowen Company," the second lowest bidder.

The Finance Commission desires to know, before proceeding further with the investigation in this case, why the Schoolhouse Commissioners did not award the contract to the lowest bidders.

Respectfully submitted,

THE FINANCE COMMISSION,
by MICHAEL H. SULLIVAN,
Chairman.

COMMUNICATION TO THE MAYOR
in relation to
 THE SALE OF TWO FERRYBOATS.

BOSTON, July 22, 1921.

HON. ANDREW J. PETERS, *Mayor*:

SIR,— In reply to your letter of the 12th instant, requesting the Finance Commission to recommend what method be adopted by the city to dispose of the ferryboats "D. D. Kelly" and "General Hancock," the Commission incloses herewith copy of report submitted to this commission by its consulting engineer which the commission approves and adopts as its report in the matter.

Respectfully submitted,

THE FINANCE COMMISSION,
 by MICHAEL H. SULLIVAN,
Chairman.

BOSTON, July 18, 1921.

To the Finance Commission:

GENTLEMEN,— As regards the request of the Mayor of July 12, for advice regarding the proper method to be adopted in disposing of two old side-wheel ferryboats that will no longer be needed in the Ferry Service, I believe that these boats should be sold as soon as possible either by public auction or after the receipt of competitive bids.

The method of securing competitive bids I believe to be preferable to the public auction method on account of less expense, the greater difficulty in effecting collusion between prospective purchases and as giving city authorities more time to consider the adequacy of the

price offered. If the public auction method is adopted a minimum price should be fixed for the sale of each boat.

Whatever method is adopted the sale should have adequate preliminary advertising. I suggest that copies of the advertisement of sale be sent to officials of ferries, particularly those across the Hudson river in New York State and of ferries across Maine rivers. Lists of such ferries can be found in the "Automobile Blue Book" for various districts.

Respectfully submitted,

GUY C. EMERSON,
Consulting Engineer.

SECOND COMMUNICATION TO THE MAYOR
in relation to
 THE SALE OF TWO FERRYBOATS.

BOSTON, July 25, 1921.

HON. ANDREW J. PETERS, *Mayor*:

SIR,— In reply to your letter of the 22d instant, relative to the method to be adopted by the city in disposing of ferryboats "D. D. Kelly" and "General Hancock," I inclose herewith copy of a report from the consulting engineer of the Finance Commission made in consequence of your letter of July 23, which I think contains the information you seek.

Respectfully submitted,

THE FINANCE COMMISSION,
 by MICHAEL H. SULLIVAN,
Chairman.

BOSTON, July 23, 1921.

To the Finance Commission:

GENTLEMEN,— The letter of the Mayor dated July 22 refers to a report recently made by me regarding the method to be adopted for disposing of two superfluous ferryboats.

The Mayor requests information as to what the commission considers "adequate preliminary advertising." The word "adequate" was used by me in the connection as indicating an amount of advertising such as is lawfully and reasonably sufficient for the purpose. Under the circumstances I believe that the opening of

bids or the holding of the sale two weeks after the appearance of the advertisement in the *City Record* would be sufficient, providing, however, that notices to possible bidders, such as ferry companies, be sent by mail or otherwise as soon as practicable after the appearance of the first advertisement in the *City Record*.

Respectfully submitted,

GUY C. EMERSON,
Consulting Engineer.

COMMUNICATION TO THE MAYOR
in relation to
THE ANNUAL REPORTS OF THE CITY
DEPARTMENTS.

BOSTON, July 29, 1921.

HON. ANDREW J. PETERS, *Mayor*:

SIR,—The annual reports of city departments are authorized by the Revised Ordinances, ch. 3, sec. 24, which is as follows:

Every officer in charge of a department shall within thirty days after the close of the financial year transmit to the mayor a report containing a statement of the acts and doings, and receipts and expenditures, of the department for such financial year, together with such other matters as may be required by law, or as the mayor or officer may deem to be of public interest.

These reports are of little value unless made promptly and unless they contain at least the matters set forth in the ordinance. It seems very necessary that Your Honor should receive these reports within the time stated in the ordinance, in order that the work of the year past in each department, together with the receipts and expenditures of money during the year, may be known to you.

The responsibilities resting upon the Mayor under the charter amendments of 1909, particularly as to the initiation of all appropriations and the preparation of the annual budget, make these reports very valuable to Your Honor, provided they are made promptly. Furthermore, the printing and distribution of these reports for the use generally of the citizens of the city should follow immediately upon their being made to Your Honor.

At the present time not only are these annual reports not made within the time specified, but in the opinion of the Finance Commission do not contain, when they are made, adequate data from which to ascertain the cost of the city and county government.

Generally these reports are lacking in any general summarized statement of the year's work. It is necessary for one seeking information concerning the cost, acts and doings of a department in its annual report to make a personal visit to the department official, in order to receive the information required. For the most part these reports are filled with tables and charts with insufficient explanatory statements to enable an inquiring citizen to ascertain what the department really accomplished during the year.

It cost the city approximately \$42,000 a year to print these reports. This sum is practically a total waste.

At the present time there is no supervision over these department reports. Each department has its own method of making its report and includes such matter as appears to it to be important, endeavoring, however, in a general way to comply with the ordinance.

On July 15 of this year one department had just sent in its report for the year before last (1919-20). Up to July 15, 1921, nineteen departments had not made their reports for last year.

The Commonwealth of Massachusetts some years ago made a study of this question of annual reports of the state departments and, as a consequence, created a department for the purpose of editing and revising all annual reports made at the expense of the Commonwealth. The result has been a great saving to the Commonwealth in printing and a more intelligent and valuable type of report.

European cities appear to be doing this matter in a very intelligent way. In some of the larger cities it is the custom to collect from departments all essential facts regarding administration and costs and publish them in an appropriate way in a book called the "Year

Book," which is sold, the proceeds paying nearly the whole cost of publication.

The Finance Commission issued a report on this matter on September 20, 1917. (See Finance Commission's Reports, Vol. XIII., p. 130.) On November 9, 1918, the Finance Commission issued a report on the matter of abolishing the Statistics Department and providing a method of supervising the annual reports. (See Finance Commission's Report, Vol. XIV., p. 201.) The recommendations made in that report are adopted for this report, as follows:

1. That the Statistics Department as at present constituted be abolished.
2. That the position of city statistician be created within the Mayor's office.
3. That the city statistician be charged with the following duties:
 - (a.) Compiling and publishing the "Municipal Register" once every four years.
 - (b.) Publishing annually, except every fourth year, a small pamphlet on changes in city government and city statistics, including concise tables of cost.
 - (c.) Editing, revising, controlling and distributing annual reports of departments.
 - (d.) Supervising Municipal Reference Library.
 - (e.) Conducting correspondence concerning the city with outside inquirers.

Respectfully submitted,

MICHAEL H. SULLIVAN, *Chairman*,
 COURTENAY GUILD,
 JOHN F. MOORS,
 JAMES M. MORRISON,
 J. WALDO POND,
The Finance Commission.

COMMUNICATION TO THE CITY COUNCIL

*in relation to*AN ADDITIONAL LOAN FOR THE CON-
STRUCTION OF HIGHWAYS.

BOSTON, September 23, 1921.

To the Honorable the City Council:

GENTLEMEN,—The Finance Commission has given consideration to an order now before your honorable body providing for an additional appropriation of \$200,000 to be raised by loan for the construction of highways.

The commission understands that this order was presented to your honorable body by the Mayor, without giving any reasons for this appropriation except that the \$800,000 loan authorized April 5, 1921, for the construction of highways was not sufficient.

The reasons given by the Board of Street Commissioners for appropriating this additional \$200,000 at this time are contained in a letter and statement sent to the Mayor on August 24, 1921, which are as follows:

HON. ANDREW J. PETERS,

Mayor of the City of Boston:

DEAR SIR,—Attached is a statement of matters pending before this department for expenditures which are chargeable to the loan "Highways, Making of," requested by Your Honor yesterday.

Very truly yours,

J. J. O'CALLAGHAN,

Chairman.

STATEMENT.

Matters Chargeable to Loan, "Highways, Making of."

Uncollected awards for land and grade damages,	
about	\$55,000
Carried forward	\$55,000

<i>Brought forward</i>	\$55,000
It is probable that not more than one half of this amount would have to be paid out this year.	
For proposed widening of Washington street, opposite Milk street	57,500
No part of this sum would be paid until entry for construction is made on the street. Entry should not be made until the new building is constructed.	
For widening Ashland street, West Roxbury, between Washington and Sycamore streets . .	45,000
An immediate expenditure if the order is passed.	
Total	<u>\$157,500</u>

Hearings have been given for improvement of the following-named streets and there is an insistent demand that the work be authorized:

Redlands road, West Roxbury	\$29,600
Amherst street, West Roxbury	10,500
Clafin street, South Boston waterfront	17,500
Landseer street, West Roxbury	18,400
Wildwood street, Dorchester	12,700
Total	<u>\$88,700</u>

NOTE.— No expense has been incurred in any of these streets.

The foregoing statement of the Street Commissioners to the Mayor does not disclose how the \$800,000 loan of April 5 last was expended. The Finance Commission therefore made inquiry of the Board of Street Commissioners as to the disposition of this \$800,000 loan. The reply to this inquiry contains a list of the streets designated by the Street Commissioners for construction this year — 18 in all — giving the estimated cost of construction as \$235,300 and land damage awards of \$771.75. But these land damage awards have not been paid and less than \$600 has been expended on the construction of these eighteen streets by the Public Works Department.

It appears, therefore, that only a nominal part of the \$800,000 raised by loan last April has been expended on this year's street construction program, although the auditor's exhibit for September 1, 1921, indicates that \$720,746.92 of the \$800,000 loan has been expended. It must have been expended for street construction contemplated before this fiscal year.

The following is the list of streets designated for construction by the Street Laying-Out Department this year, with the estimated cost of construction, damages awarded and total cost:

NAME OF STREET.	Estimated Cost of Construction.	Damages Awarded.	Total.
Chilton road, West Roxbury.....	\$10,700 00	None.	\$10,700 00
Elmhurst street, Dorchester.....	11,100 00	None.	11,100 00
D street, South Boston.....	70,500 00	None.	70,500 00
Arborway, West Roxbury.....	20,500 00	None.	20,500 00
Morton street, West Roxbury, from Forest Hills avenue.	31,300 00	None.	31,300 00
Ruxton road, Dorchester.....	11,300 00	None.	11,300 00
Parkwood terrace, West Roxbury.....	6,500 00	\$671 75	7,171 75
Metcalf street, West Roxbury.....	8,600 00	None.	8,600 00
Marie street, Dorchester.....	7,000 00	None.	7,000 00
Hastings street, West Roxbury.....	7,600 00	None.	7,600 00
Colberg avenue, West Roxbury.....	9,600 00	None.	9,600 00
Crescent avenue, Dorchester.....	100 00	None.	100 00
Chesterton street, Roxbury.....	100,000 00	None.	10,000 00
Balsam street, Dorchester.....	13,300 00	None.	13,300 00
Pond View avenue, West Roxbury.....	7,400 00	None.	7,400 00
Lawnwood place, Charlestown.....	2,400 00	None.	2,400 00
Morton street, West Roxbury, at Canterbury street.	2,100 00	\$100 00	2,200 00
Tilton street, Roxbury.....	5,300 00	None.	5,300 00
Total.....			\$236,071 75

It will be noted that none of these streets appears in the list given to His Honor the Mayor by the Board of Street Commissioners in answer to his inquiry of August 23 last, although they were matters pending before the department for expenditures.

It is not at all clear why the Street Commissioners ordered the construction of any new streets this year with so many streets from former years unfinished and to which they have apparently applied the loan that was made for this year's construction.

The Finance Commission understands that no information is furnished by the Street Commissioners or the Mayor to the City Council as to what streets are to be built from a loan proposed for that purpose. The auditor's records do not show the streets to which the loan of any particular year was applied. It appears, therefore, that there is no program furnished your honorable body to which the appropriation requested is to be applied; nor does the system of accounting indicate in sufficient detail how the money was expended. One is unable, without intensive study, to ascertain the cost to the city of constructing a public street under a loan for the making of highways; or the total amount paid in damages to abutting owners; or the amount collected from abutting owners for betterments; or the changes made in betterment assessments and the land damage awards from the original amounts established by the Board of Street Commissioners.

There appears to be no obligation upon the Street Commissioners to carry out a street construction program from this annual loan for the construction of streets, even after they have established such a program. They may designate streets and have the cost estimated, as they have done this year and then abandon that program and adopt another with totally different streets designated. The present practice and procedure of the Street Laying-Out Department and the inadequate accounting system applied to it makes it almost impossible to tell to what extent the city is committed in advance for street construction.

If a loan for the making of highways is requested in any one year, the request ought to be accompanied at least with information showing whether it was

needed to discharge past obligations, or to put into effect a new and definite program not in excess of the amount requested.

The Finance Commission opposes an additional appropriation of \$200,000 by loan for the construction of highways for the following reasons:

1. The uncollected awards for land and grade damages, stated by the chairman of the Street Commissioners to be \$55,000, is an obligation which should never have been entered into without funds to meet it. If the city is now obligated to the extent of \$55,000 by the Board of Street Commissioners in excess of the money already appropriated for that purpose this year, as indicated by the letter of the chairman of the Street Commissioners to His Honor the Mayor, that fact should be further established and dealt with as a special matter.

2. The item of \$57,500 for the proposed widening of Washington street, between Ordway place and Harvard place, will not have to be used in any event in this fiscal year on the statement of the chairman of the Board of Street Commissioners. If this widening is proposed at this time because of a donation of land by certain interests that are about to construct a building upon a part of that frontage, the city should wait until that donation is actually made before obligating itself at this time to the extent of borrowing money.

3. The widening of Ashland street, West Roxbury, should not be added to the already overburdened program of the Street Laying-Out Department with no funds to carry it out.

If this loan order is passed the borrowing power of the city is reduced to \$187,000 which, in the opinion of the Finance Commission, is far below what the proper protection of the city requires for the remaining four months of the fiscal year.

The Finance Commission recommends:

1. That the Street Laying-Out Department and the Public Works Department give a detailed statement of the present outstanding obligations to

which these two departments have committed the city on account of street construction.

2. That the Street Laying-Out Department be required to submit to the City Council a list of the streets proposed to be built and the estimated cost of each, with each order for an appropriation from the proceeds of a loan for the construction of highways, and that when any such appropriation is made the streets be designated upon which the expenditure is to be made.

Respectfully submitted,

MICHAEL H. SULLIVAN, *Chairman*,
COURTENAY GUILD,
JOHN F. MOORS,
JAMES M. MORRISON,
J. WALDO POND,
The Finance Commission.

COMMUNICATION TO THE MAYOR

in relation to

THE PROPOSED WIDENING OF WASHINGTON STREET, BETWEEN HARVARD PLACE AND ORDWAY PLACE.

BOSTON, October 7, 1921.HON. ANDREW J. PETERS, *Mayor*:

SIR,— In response to your request of September 24, 1921, for a report from the Finance Commission on the proposed widening and construction as a highway of the northwesterly side of Washington street, Boston proper, between Harvard place and Ordway place, the following is respectfully submitted.

It appears that this proposed widening of Washington street to the extent of $4\frac{1}{2}$ to 5 feet, between Harvard place and Ordway place, is in consequence of an offer to donate part of the land necessary for the widening by the abutting owners, namely, the Olympia Realty Company.

The entire distance from the southerly side of Harvard place to the northerly side of Ordway place is approximately 186 feet. Of this frontage the Olympia Realty Company owns 122.24 feet. The Olympia Realty Company is about to construct a theater and office building on its land abutting this frontage of Washington street, and has proposed to the city that if the widening is made the entire distance between Harvard place and Ordway place it will give to the city a strip of land $4\frac{1}{2}$ to 5 feet in width along its entire frontage. Other land involved in this widening, fronting 44 feet on Washington street, is controlled by the Olympia Realty Company, or some of the stockholders in that company.

The Street Commissioners have estimated and would probably award the owner of the land thus fronting 44

feet on Washington street the sum of \$28,500, and the present owner of that land is agreeable to that award. The remaining land between Ordway place and Harvard place fronts 20 feet upon Washington street. This frontage, to the extent of $4\frac{1}{2}$ to 5 feet in depth, would have to be taken without any previous agreement with the owners as to the amount of damages to be claimed, so far as is known at the present time.

Therefore of the 186 feet of frontage involved in the taking, averaging $4\frac{3}{8}$ feet in width and containing 855 square feet, approximately two thirds of the area is given free of charge to the city. More than two thirds of the balance is released for an award that appears to be entirely reasonable from the standpoint of the city. The remainder, or less than one ninth of the whole area, is the only portion for which the city takes any risk of having to pay more than the Board of Street Commissioners may think reasonable.

The portion of this frontage that is given without compensation by the Olympia Realty Company is given without any condition whatsoever. The Finance Commission is informed that all land taken by the city is taken by right of eminent domain, regardless of whether the price is agreed upon and deed taken, or otherwise.

It is unnecessary to state that the widening of Washington street at the point in question is desirable. But the only way that any part of Washington street through the congested district can ever be widened to any extent and for any great length, without imperilling the finances of the city, is by taking advantage of conditions similar to those now presented.

It appears that this widening has been before the Street Commissioners and Your Honor since May of this year and, for reasons that have not been made clear to this commission, no action was taken to secure this widening until the \$800,000 appropriated by loan in April last was expended.

One of the reasons given by the Street Commissioners for the policy of not adhering to a fixed program for the

laying out and construction of highways is that "Occasions are constantly arising where buildings are to be removed on streets where widenings are planned and where the erection of new buildings on existing lines would be a positive detriment to the city's welfare. . . . Limiting the use of the loan would prevent the quick action necessary in most of these cases."

This very policy which the Street Commissioners advance as the reason for not indicating a street program against a given appropriation proves not to have been recognized at all by them this year, when the largest amount of money in the past twenty years, with two exceptions, was appropriated by loan for the laying out and construction of streets. All of the \$800,000 loan appropriated in April of this year, with the exception of less than \$1,000, has been used to carry out programs entered into or contemplated prior to the present year.

The present borrowing power of the city — \$387,000 — is well below the margin of safety that should be retained up to the end of the fiscal year.

The City Auditor and the Finance Commission have heretofore recommended that a safe and proper reserve in its borrowing capacity for the city to maintain is a sum not less than \$500,000. (See Finance Commission Reports, Vol. VI., p. 140, and Vol. VII., p. 29.)

In the opinion of the Finance Commission the financial condition of the city for the balance of the fiscal year will not permit of an appropriation by loan for the proposed widening of Washington street without placing the city in a perilous financial condition.

Respectfully submitted,

MICHAEL H. SULLIVAN, *Chairman*,
COURTENAY GUILD,
JOHN F. MOORS,
JAMES M. MORRISON,
J. WALDO POND,
The Finance Commission.

SECOND COMMUNICATION TO THE CITY COUNCIL
in relation to
AN ADDITIONAL LOAN FOR THE CONSTRUCTION OF HIGHWAYS.

BOSTON, October 7, 1921.

To the Honorable the City Council:

GENTLEMEN,— The Finance Commission has received from your honorable body a copy of a letter from the chairman of the Board of Street Commissioners of the City of Boston commenting upon the Finance Commission's Report to your honorable body under date of September 23, upon the matter of a proposed highway loan for \$200,000.

The chairman of the Board of Street Commissioners states in his letter:

It would be difficult to adhere to any fixed program for the laying out of highways with the very limited amount of money available for such improvements from year to year. Occasions are constantly arising where buildings are to be removed on streets where widenings are planned, and where the erection of new buildings on existing lines would be a positive detriment to the city's welfare. Aside from the Washington street case, referred to above, there are three others which this Board is watching now. Limiting the use of the loan would prevent the quick action necessary in most of these cases.

In order to carry out the policy above outlined, there must always be available to the Street Commissioners sufficient money to take advantage of conditions like that now arising on Washington street.

This year your honorable body appropriated the largest sum of any one year in the past twenty years, with a few exceptions, for "Highways, Making of,"

with no limitation upon the Board of Street Commissioners as to what streets it was to be used upon, yet none of it has been retained for occasions like the Washington street widening, although this widening has been before the Board of Street Commissioners since May of this year.

It is true that the streets accepted one year may not be built until the next year. But the money which it was necessary to appropriate to construct these streets before they were accepted should be retained to build these streets and not be used to construct some other streets.

The \$800,000 appropriated this year appears to have been used first as a basis for an expenditure of \$235,000 for building the streets named in the report of the Finance Commission to your honorable body on September 23. Having served this function, the whole of this \$800,000 was used to build streets that had been designated in other years, so that the street program laid out this year is now without any appropriation by loan or otherwise.

The City Auditor, in a letter to the Finance Commission under date of September 30, stated as follows:

In answer to yours of yesterday would say that at the present time there are no authorized loans for highways, making of, not yet issued.

Where streets are designated in the loan order passed by the City Council for highways, making of, the expenses are charged to the appropriations for the particular streets; otherwise they are charged to the loan or balance of loan in the treasury at the time payment is made.

The following letter was received from John E. Baldwin, Clerk of Committees, under date of September 30, 1921:

In answer to your letter of the 29th instant, concerning street construction programs for the past three years submitted to the City Council by the Mayor and Street Commissioners, I wish to say that there were no written programs

submitted except the information contained in the Mayor's messages requesting the loan orders, which are printed in the City Council minutes.

These letters are submitted as adequate answers to the statement of the chairman of the Street Commissioners that the Auditor's report gives definite information as to the appropriation from which street construction is carried on under general loan orders, and the statement that your honorable body is informed of the streets to be built before making an appropriation.

The policy of making an appropriation in one sum for street construction before the program for the year is made up by the Board of Street Commissioners should not be continued. The Board of Street Commissioners should decide what streets are to be built with a given appropriation, but the decision should be made before the appropriation is requested and adhered to thereafter.

The Finance Commission is in entire agreement with the judgment that the opportunity now offered to widen Washington street, between Harvard place and Ordway place, should not be lost, but it does not believe that the borrowing power of the city at the present time should be further lowered and the city's finances imperiled for the next four months, even to take advantage of this opportunity. In any event, whenever an appropriation is made for this widening or any other such widening it should be so designated and not be mingled in a general appropriation for "Highways, Making of."

The Finance Commission reaffirms its report to your honorable body of September 23, 1921, and the recommendations therein contained.

Respectfully submitted,

THE FINANCE COMMISSION,
by MICHAEL H. SULLIVAN,
Chairman.

COMMUNICATION TO THE CITY COUNCIL
in relation to
UNEMPLOYMENT AND THE EXPEDIENCY OF
BORROWING OUTSIDE OF THE DEBT
LIMIT FOR ITS RELIEF.

BOSTON, October 21, 1921.

To the Honorable the City Council:

GENTLEMEN,— The Finance Commission is in receipt of a copy of certain preambles, a resolution and an order presented to your honorable body on October 17, 1921, concerning unemployment in the city; the advisability of the City of Boston furnishing employment in a greater measure than it now does; a statement of the borrowing power of the city at the present time; the advisability of immediate legislative action to authorize the city to borrow outside of the debt limit; a resolution calling for a special session of the State Legislature for the purpose of authorizing the borrowing by the city of \$5,000,000 outside the debt limit; and an order that the Mayor be requested to transmit such resolution to the Governor of the Commonwealth, with the request that the Governor act in accordance with the terms of the resolution.

The letter of the Assistant City Clerk transmitting this copy is as follows:

BOSTON, October 28, 1921.

BOSTON FINANCE COMMISSION, Tremont Building, Boston,
Mass.:

GENTLEMEN,— I transmit herewith a copy of preambles, resolution and order which, on October 17, 1921, was referred by the City Council of Boston to the Finance Commission, with a request for an immediate report.

Very truly yours,

W. J. DOYLE,
Assistant City Clerk.

The Finance Commission, under the terms of this letter, does not know upon just what your honorable body wishes it to report. An inquiry was made of the Assistant City Clerk for the text of the order by which your honorable body referred the foregoing preambles, resolution and order to this commission and it was learned that the order was simply a bare reference.

The Finance Commission wishes to know from your honorable body upon just what phases of the matters contained in the preambles, resolution and order above referred to, and to what extent a report is desired.

Respectfully submitted,

THE FINANCE COMMISSION,
by MICHAEL H. SULLIVAN,
Chairman.

COMMUNICATION TO THE CITY COUNCIL
in relation to

THE LEASE OF REFRESHMENT PRIVILEGES
AT THE REFECTORY BUILDING IN
FRANKLIN PARK AND THE HEADHOUSE
IN SOUTH BOSTON, TO THE WOMEN'S
EDUCATIONAL AND INDUSTRIAL UNION.

BOSTON, October 27, 1921.

To the Honorable the City Council:

GENTLEMEN,— The Finance Commission is in receipt of the following order of the City Council:

Ordered, That the Boston Finance Commission be hereby requested to investigate the contract entered into between the Women's Educational and Industrial Union relative to the leasing of the refectory building privileges in Franklin Park and leasing of privileges of the headhouse to the same organization, to determine as to whether or not the city has entered into a legal contract, and as to whether or not same is to the advantage or disadvantage of the city.

The question of whether or not the city has entered into a legal contract is for the city Law Department, and has already been answered by the Law Department in an opinion filed with the City Council on September 7, 1921. (See City Council Minutes, p. 220.)

The question of whether or not the leases as made are to the advantage or disadvantage of the city has been considered by the Finance Commission.

It appears that these leases were made with the Women's Educational and Industrial Union after the Park Department had had very unsatisfactory experience with former lessees who received the concession privileges after public competition. The Park Department found that the prices charged by former lessees for refreshments were high; that the quality of the food served was poor; and that the premises were kept in an unsanitary condition, especially the Franklin Park refectory.

The purpose of maintaining places of refreshment in our public parks is for the comfort and accommodation of citizens who frequent them, particularly the children and their attendants. The first consideration, therefore, should be given to the sanitation and cleanliness of the buildings.

In respect to the refreshments, such as the food and drink, that is offered for sale at those places, primary consideration should be given to the quality. Nor should the citizens, and particularly the children, be overcharged for such refreshments as are sold to them in the city's parks.

The city has dealt with this question in another department. For years thousands of high school pupils have been provided with lunches of excellent quality, prepared and served under clean and sanitary conditions, at practically cost prices, by the Women's Educational and Industrial Union.

The Park Department, recognizing that the object of these places of refreshment in the public parks was similar, if not identical, with that of serving lunches to school children in the high schools, applied to the Women's Educational and Industrial Union to extend its service to the refectory building at Franklin Park and the headhouse at Marine Park, South Boston.

The improvement in quality of food, its low selling price, and the excellent condition in which the buildings are maintained by the Women's Educational and Industrial Union are so out of proportion to the small sum of money which might be saved by the city under competition, that the action of the Park Department seems to be fully justified and the leases made are, in the opinion of the Finance Commission, to the advantage of the citizens.

Respectfully submitted,

THE FINANCE COMMISSION,
by MICHAEL H. SULLIVAN,
Chairman.

COMMUNICATION TO THE MAYOR

*in relation to*THE ACCEPTANCE OF CHAPTER 414 OF THE
ACTS OF 1921, RELATING TO THE PAYMENT
OF MONEY TO OLIVE P. GATELY.

BOSTON, December 14, 1921.HON. ANDREW J. PETERS, *Mayor*:

SIR,— The Finance Commission desires to present to Your Honor certain facts relating to the order of the City Council accepting ch. 414 of the Acts of 1921, relating to the payment of money to Olive P. Gately by the City of Boston.

The order is based on litigation concerning certain property, viz., \$15,000 with interest to date, between the City of Boston and the Gately estate. The facts are as follows:

The property is numbered 468-484 Albany street and consists of land, a pile wharf and dock located on the South Bay. In 1866 the City of Boston paid \$2,800 for the right to construct and maintain a sewer across the premises in question. (See Suffolk County Deeds, Book 874, p. 71.)

In 1896 Grant Gately, husband of Mary M. Gately and father of Olive P. Gately, purchased the property by deed which was specifically subject to the easement of the City of Boston to lay and maintain a sewer across the premises.

In September, 1902, Mrs. Gately, as the guardian of her two minor children, her husband being deceased, petitioned the Land and Harbor Commission for permission to build a stone sea wall and to fill in the land back of it. The Sewer Department of the City of Boston objected, as the sea wall would cut off the sewer

which had existed since 1866, when the city purchased the easement and constructed the sewer and since that time maintained it across the premises. Mrs. Gately claimed that the city had no right in or across her property and Mr. Bailey, then Corporation Counsel, reported that he failed to find any record granting the City of Boston the right to maintain a sewer across the premises.

Shortly thereafter a contract was drawn up by him between the city and Mrs. Gately, acting as guardian of her children, whereby the city agreed to build the wall and fill in back of it, in consideration of the right to construct and maintain a sewer across the premises. This was clearly an illegal contract because Mrs. Gately, as guardian of her children, could not without license of the Probate Court grant any easement to the City of Boston. This license had not been obtained.

On July 11, 1903, a part of the buildings and wharf was destroyed by fire and the Gately estate collected approximately \$20,000 from the fire insurance companies for this loss. There was some delay on the part of the city in rebuilding the wharf, and upon Mrs. Gately's claim that this delay was causing her a loss, the city, through its Superintendent of Streets, agreed to pay a rent for the wharf of \$450 a month. This rent continued for eight months and a total of \$3,600 had been paid Mrs. Gately, when the new Corporation Counsel, Mr. Babson, ordered further payments stopped, on the ground that the transaction was illegal.

On January 11, 1905, the city made a contract with the Cahill Construction Company for the construction of a sewer bulkhead and wharf, and under this contract the Construction Company was paid \$18,460.45, of which the bulkhead and wharf were estimated to cost \$10,432.14 and the sewer approximately \$8,028.31. In addition the city dumped about 15,000 loads of filling upon the premises.

Soon after the payment of rent was stopped, Mrs. Gately made a claim that the contract had not been

carried out according to specifications, and that the city still owed her a large sum of back rent. On this claim she received \$9,800 from the city, executing on January 30, 1896, a release as guardian of all claims against the city. In consideration of this settlement, Mrs. Gately agreed that the specifications in the original contract calling for two-inch plank over the entire wharf might be changed and a gravel surface substituted therefor.

Later, Mrs. Gately, as guardian of her minor children, repudiated this release on the ground that she was not authorized to make it by the Probate Court. The Corporation Counsel of the City of Boston has stated that the release is undoubtedly of no effect.

On March 28, 1906, the chief engineer of the Sewer Department wrote Mrs. Gately that it had been reported that the wharf had been damaged by being struck by a barge. Nothing was done by the owners of the property to repair or protect the wharf and as a consequence it fell into disrepair.

In July, 1909, Mrs. Gately, as guardian of her children, brought suit against the city in the Superior Court to recover damages for breach of contract and for rent. The case was referred to an auditor, who found that the break in the bulkhead was due to faulty construction and reported in favor of the plaintiffs. The case was subsequently tried before a jury, who found for the plaintiffs \$17,800 on the first count, and reported that if there was any legal liability on the city on the second count judgment should be rendered also for the plaintiffs in the sum of \$15,000. The judge, finding no legal liability on the city on the second count, ordered a verdict for the city. Both parties filed exceptions to the verdict and in 1913, just before the case was reached for argument in the Supreme Judicial Court, it was settled by agreement of all parties in the sum of \$23,000. This settlement was approved by the guardian *ad litem* of the two minor children and the guardian signed a report as follows:

In the above entitled cause the parties having come to an understanding whereby the defendant is to pay the plaintiffs the sum of twenty-three thousand dollars without costs, I assent on behalf of the minor plaintiffs to an entry of an agreement for judgment for said amount, believing after a full investigation that it is for the interest of said minors that this settlement be made.

WILLIAM HENRI IRISH.

This report was approved and allowed by the Court after a hearing. Exceptions of both parties were waived, judgment was entered for the plaintiffs in the sum of \$23,000, and the money was paid by the City of Boston.

Copies of the following papers on file in the courts show the various steps taken to complete the above agreement:

GRANT GATELY *et al.* v. CITY OF BOSTON.

Plaintiffs' Waiver of Motion for New Trial.

Now come the plaintiffs and waive their motion for new trial, heretofore filed.

By their attorneys,

ELDER WHITMAN & BARNUM.

M. M. G.*

Filed January 13, 1913.

COMMONWEALTH OF MASSACHUSETTS.

SUPREME JUDICIAL COURT FOR THE COMMONWEALTH.
SUFFOLK SS.

GRANT GATELY *et al.* v. CITY OF BOSTON.

Waiver of Exceptions.

And now come the plaintiffs and the defendant in the above entitled action, and each waives their and its exceptions heretofore filed and now pending in this court.

ELDER WHITMAN & BARNUM,

Plaintiffs' Attorneys.

GEORGE A. FLYNN,

M. M. G.*

Defendant's Attorney.

* Papers initialed by Mary M. Gately in ink.

COMMONWEALTH OF MASSACHUSETTS.

SUPREME JUDICIAL COURT FOR THE COMMONWEALTH
AT BOSTON JANUARY 13, 1913.

In the case of

GRANT GATELY *et al. p.p.a. et al. v.* CITY OF BOSTON,
pending in the Superior Court for the County of Suffolk.

Ordered, That the clerk of said court in said county make
the following entry under said case in the docket of said
court; viz.:

Exceptions waived.

By the Court,
C. H. COOPER, *Clerk.*

A true copy.
Attest.

C. H. COOPER, *Clerk.*

COMMONWEALTH OF MASSACHUSETTS.

SUFFOLK SS.

SUPERIOR COURT.

GRANT GATELY *et al. v.* CITY OF BOSTON.

Agreement for Judgment.

In the above entitled case it is agreed that the exceptions of
both parties and the plaintiffs' motion for new trial having
been waived judgment may be entered forthwith for the plain-
tiffs, Grant Gately and Olive Gately, in the sum of twenty-
three thousand dollars (\$23,000) without costs, and that exe-
cution issue upon the judgment at once and that as to the
plaintiff Grace G. Kane, the entry may be made: judgment
for the defendant without costs.

ELDER WHITMAN & BARNUM,
Plaintiffs' Attorney.

GEORGE A. FLYNN,
Defendant's Attorney.

M. M. G.*

At the time of this settlement all the parties partici-
pating in it, viz., the Assistant Corporation Counsel of
the City of Boston; William H. Irish, the guardian *ad*
litem and next friend of the two minor children; and

* Papers initialed by Mary M. Gately in ink.

Edmund A. Whitman, representing the plaintiff, Mrs. Gately, considered it a final settlement of all claims made by Mrs. Gately. There was no reservation of any kind.

In 1914 and again in 1915 Mrs. Gately presented a petition to the Legislature seeking to set aside this settlement and to have the City of Boston authorized to pay her the \$15,000 mentioned above. The bill failed of passage both years.

In 1916, however, chapter 253, authorizing the City of Boston to pay the minor children of Mrs. Gately, or their legal guardian, the sum of money in dispute, became a law without the Governor's signature. In order to become effective the act had to be accepted by the city government, but Mrs. Gately was unable to convince the City Council of the justice of her claims. As the act had to be accepted before January 1, 1918, and no action was taken prior to that time by the city government, the act was rendered ineffectual.

The petitioner having obtained the passage of chapter 414 of the Acts of 1921, authorizing the city to pay to Olive P. Gately this sum of money, subject to the approval of the City Council and Your Honor, and the City Council having accepted the act, the Finance Commission recommends that Your Honor refuse to approve the order of the City Council.

Respectfully submitted,

THE FINANCE COMMISSION,
by MICHAEL H. SULLIVAN,
Chairman.

COMMUNICATION TO THE MAYOR
in relation to
 THE AUDITING SYSTEM OF THE CITY OF
 BOSTON.

BOSTON, December 17, 1921.

To the Honorable the Mayor and City Council:

GENTLEMEN,— On April 26, 1921, the Finance Commission reported to the Mayor that on the first day of the present financial year, February 1, 1921, the City of Boston owed \$1,800,000 more than was shown by the books of the Auditing Department, and recommended that the Mayor's financial statement to the City Council on February 7, 1921, to the effect that the city had a surplus of \$3,817,250.61 at the beginning of this financial year, be revised. The Mayor replied in part as follows:

The point to be emphasized is, that the commission in its ill-advised communication failed to state that a compliance with its contention would have included the payment of fourteen months' invoices in the last year as well as thirteen months' payments to those employees paid on a monthly basis. . . .

In this connection it may be of public interest to note that the commission's statement was further in error as it included over \$517,000 of school pay rolls, which under the law, could, not in any event be paid from the surplus stated, as the expenses of the School Department are separately provided for by state law.

Thereafter the Finance Commission continued the investigation of the system of accounting of the City Auditor's department and engaged Patterson, Teele and Dennis, accountants and auditors, to assist it,

The following facts seem now well established:

1. The authority given the treasurer of the city to pay current expenses of the financial year before the appropriations for the year are made has been misused.

2. This misuse of authority by the treasurer has continued for twenty-five years, and has resulted in accumulating a present undisclosed debt of more than \$3,000,000, for the payment of which no provision has been made.

3. The Corporation Counsel has rendered to the Finance Commission an opinion that this misuse of city funds by the treasurer is illegal.

4. This illegal use of funds,

(a) has made one financial year overlap the next;

(b) has made it possible for heads of departments at the end of the financial year to show balances of unexpended appropriations when in fact no such balances existed;

(c) has destroyed the effect of those provisions of the charter amendments prohibiting expenditures in excess of appropriations and especially the penalty provided in section 16 of these amendments;

(d) has encouraged extravagance by heads of departments;

(e) and, except in the matter of salaries, has rendered the segregated budget of little or no effect.

5. The city had no surplus at the end of the last financial year and has had none for many years. On the contrary, for January next, the last month of the present financial year, there will not be legally available sufficient funds to pay the current bills against the city and the salaries of the city officials and employees. Funds for these purposes can be made legally available only by action of the Legislature.

6. The present auditing system of the city is a cash book system, with the result that the income receivable but uncollected, and liabilities incurred but unpaid, are not brought into account in arriving at the financial condition of the city at the end of the year.

7. It does not disclose the actual financial condition of the city at any time.

8. No information is available from the auditor's accounts as to whether or not any department ends its financial year with unpaid bills in excess of the amount of its authorized expenditures under the budget.

9. The monthly pay roll of the School Committee for January, 1921, was paid with money that had not been appropriated. This payment was not regularly entered in the books of the city until February 1, 1921.

The comments and recommendations of Patterson, Teele and Dennis and the opinion of Corporation Counsel Hill are annexed to this report.

The Finance Commission recommends:

1. That the February 1st draft be abolished and the City Treasurer be directed to observe the construction given by the Corporation Counsel to ch. 320 of the Acts of 1889.

2. That immediate steps be taken to obtain authority, if possible, from the Legislature to provide adequate funds to meet the cost of carrying on the business of the city and county for the remainder of the present financial year, which appears to be the only recourse left for the present predicament.

3. That the Mayor inform the School Committee of the necessity of providing similarly for its needs.

Respectfully submitted,

MICHAEL H. SULLIVAN, *Chairman.*

COURTENAY GUILD,

JOHN F. MOORS,

JAMES M. MORRISON,

J. WALDO POND,

The Finance Commission.

APPENDIX A.—COMMENTS AND RECOMMENDATIONS.

COMMENTS.

The present accounting system of the city was inaugurated nearly a century ago, many years before the incumbency of the present City Auditor, who is held in high esteem because of his sterling character and long experience in city finance.

In the operation of the system the city's accounts are recorded upon the basis of receipts collected, and charges paid, and are not recorded on the basis of income actually accrued and expenditure actually incurred during a given period, with the result that income receivable but uncollected, and liabilities incurred but unpaid, are not brought into account in arriving at any so-called "surplus." Such a "surplus" represents merely the excess of income actually received during a year over the income estimated for that year, plus unexpended balances of appropriations. It is customarily anticipated that the city's estimated income, including taxes for a year, will meet the appropriations made for that year, plus the state taxes, assessments, etc. Consequently, if the income, plus unexpended appropriations, should prove to be less than the estimate there would be a deficit. No provision being made for unpaid liabilities, the precise financial condition of the city is not disclosed, and no information is available as to whether any department ends its financial year with unpaid bills that go beyond the amount of its authorized expenditure under the budget. In every year there have been outstanding obligations paid by the City Treasurer which were really in relation to a prior year, though not ascertained until the bills for the same were presented for payment, sometimes weeks or even months after the obligations were actually incurred. For example, on February 1, 1921, the first day of the current

fiscal year, the City Auditor's draft for regular department appropriations then paid amounted to \$1,137-953.19, the whole of which represented liabilities contracted in the preceding fiscal year. There were of course, many other bills applying to that year which were paid through subsequent drafts of the ensuing year, but their amount could only be determined as a result of a detailed examination of all bills paid in the earlier months of the ensuing year. In this connection it should be noted that the School Department's pay rolls for services during the month of January, 1921, were really paid prior to the first of February but, as has been customary for several years, the City Treasurer carried these payments as "an advance" and charged them off on the February 1 draft of the new fiscal year. Obviously, all outstanding obligations at the end of the fiscal year ought to be offset by corresponding unexpired balances of appropriations.

While it is true that in each fiscal year of the city there have been charged expenditures for a period of twelve months, it is also apparent that under the present procedure (1) the city's annual financial condition is incorrectly stated; (2) the expenditures actually incurred by the city in each year are not clearly disclosed, and (3) the charges made against appropriations during a year may include items relating to a former year's appropriation, so that items for which appropriations have been made may become chargeable in an ensuing period to an appropriation not provided actually for them. This would seem to be contrary to section 16 of ch. 486 of the Acts of 1909 which provides that "no official of said city (Boston), except in case of extreme emergency involving the health or safety of the people or their property, shall expend intentionally in any fiscal year any sum in excess of the appropriation duly made in accordance with law, nor involve the city in any contract for the future payment of money in excess of such appropriation, except as provided in sec. 6 of this act. Any official who shall violate the provisions of this sec-

tion shall be punished by imprisonment for not more than one year, or by a fine of not more than one thousand dollars, or both."

It was not until April 11, 1921, that the Committee on City Appropriation reported the Appropriation Bill for the city and county for the fiscal year February 1, 1921, to January 31, 1922. Consequently, bills and pay rolls that were paid between February 1, 1921, and April 11, 1921, in advance of appropriations, would seem to have been paid under authority of ch. 320 of the Acts of 1889, which provides that "at the beginning of the financial year, to meet the liabilities of the several departments incurred in the carrying on of the work entrusted to them, until the city government shall otherwise order, expenditures may be made, liabilities may be incurred and payments made from the treasury from any funds therein, and the treasurer may borrow money in anticipation of taxes to provide funds. Such expenditures and liabilities shall not exceed for each department one third the entire amount appropriated for the department the previous year, and shall be considered and reckoned as a part of the expenditures of, and the money paid therefor as a part of the appropriations for, the current financial year."

RECOMMENDATIONS.

Whenever the head of a city department authorizes any expenditure a record of that commitment, representing an obligation of the city, ought to be immediately available for the information of the Mayor, the City Treasurer and the City Auditor, in order that there may be maintained an accurate record of the city's financial condition and a current check upon the actual state of appropriations for current expenditures. It is noteworthy that in line with modern developments in civic accounting, many cities throughout the country, including cities in Massachusetts, have abandoned their former method of recording income merely as it is received and charges merely as they are paid, and have

adopted the "accrual" basis of income and expenditure in their system of accounting and financial reports.

It is recommended, therefore, that the City of Boston's system of accounting and reporting should be established upon a fiscal year basis in fact and not merely in name, in order that all charges incurred by the city (whether paid or unpaid) may be brought into account in the fiscal year to which they relate, and in order that the actual status of departmental appropriations and of financial condition may be clearly and currently disclosed. On this basis the city's income should also be reported as it accrues for each year, and not merely as it is collected, so that, for example, all uncollected taxes may be brought into account for the year to which they actually relate, and special diligence directed to the collection of overdue taxes and assessments.

If the city's system of accounting and reporting were thus established upon an income and expenditure basis, it would be necessary for the City Auditor to be advised whenever an obligation were incurred by, or on behalf of, any city department, so that he could forthwith record the same as a charge against the appropriation provided for it, and as a liability or commitment assumed by the city. The practice of disregarding such contracts and commitments until a bill for the same (possibly belated) has been forwarded for approval by the department affected would thus be abolished. In maintaining such revised system certain additional records would be required in the City Auditor's office, including a "register of appropriations, contracts, and open market orders" for each city department and appropriation sub-classification supplemented by an "appropriation ledger" for the same departmental sub-classification. The register of appropriations, contracts and open market orders would, of course, record the initial appropriation, as well as the transfers to and transfers from that appropriation, representing each sub-classification of the segregated budget for each department. The register

would also record the "reserve for encumbrances," comprising the requisitions or orders placed by the departments. It would further show the disbursements made through approved bills against the designated appropriation, with the result that for each appropriation there would be currently disclosed "balance of appropriation," comprising:

(1.) Balance unencumbered (*i. e.*, not reserved against orders placed).

(2.) Balance unexpended (*i. e.*, the difference between original appropriation, plus or minus transfers on the one hand, and the disbursements made through approved bills, on the other hand.

The summarized totals of the entries in such register of appropriations, contracts, and open market orders, would be carried into a controlling "appropriation ledger" for each sub-classification of the segregated budget affected. Inasmuch as the majority of the commitments or purchase orders of the city departments are made through three principal purveying departments of the city, viz.: (1) Supply Department, (2) Public Buildings Department, (3) Printing Department, the advices of requisitions, or purchase orders, to be sent to the City Auditor's Department would largely originate in one of those purveying departments, but, of course, copies of all orders placed by department heads outside of the three departments named should also be transmitted promptly to the City Auditor for record by him in the manner indicated above. Through such records the actual liabilities and commitments of the city would be clearly disclosed from day to day, and a continuous check would be maintained upon the status of each appropriation for current expenditures. Certain other changes of procedure, incidental to the inauguration of the system herein recommended for the City Auditor's Department, should form the subject of a more detailed examination and report.

In the meanwhile we desire to express our apprecia-

tion of the courtesy and attention shown us by the City Auditor in the course of the preliminary examination we have made.

Respectfully submitted,

PATTERSON, TEELE AND DENNIS,
Accountants and Auditors.

APPENDIX B.

CITY OF BOSTON LAW DEPARTMENT,
73 Tremont Street, December 18, 1921.

HON. MICHAEL H. SULLIVAN, *Chairman, Finance Commission*, Tremont Building, Boston 9:

DEAR SIR,— In your letter of 2d November you requested my opinion whether sec. 6, ch. 266, Acts of 1885, as amended by ch. 320, Acts of 1989, authorizes the City Treasurer to pay obligations brought over from the prior fiscal year in excess of the balances also brought over from the same year, before the annual appropriations are made.

The statute in question reads as follows:

The executive powers of said city, and all the executive powers now vested in the board of aldermen, as such, as surveyors of highways, county commissioners or otherwise, shall be and hereby are vested in the mayor, to be exercised through the several officers and boards of the city in their respective departments, under his general supervision and control. Such officers and boards shall, in their respective departments, make all necessary contracts for the employment of labor, the supply of materials, and the construction, alteration and repair of all public works and buildings, and have the entire care, custody and management of all public works, institutions, buildings and other property, and the direction and control of all the executive and administrative business of said city. They shall be at all times accountable for the proper discharge of their duties to the mayor, as the chief executive officer, whose duty it shall be to secure the honest, efficient and economical con-

duct of the entire executive and administrative business of the city, and the harmonious and concerted action of the different departments. Every contract made as aforesaid in which the amount involved exceeds two thousand dollars shall require the approval of the mayor before going into effect; and no expenditure shall be made nor liability incurred for any purpose beyond the appropriation duly made therefor.

Except that at the beginning of the financial year, to meet the liabilities of the several departments incurred in the carrying on of the work entrusted to them, until the city government shall otherwise order, expenditures may be made, liabilities may be incurred and payments made from the treasury from any funds therein, and the treasurer may borrow money in anticipation of taxes to provide funds. Such expenditures and liabilities shall not exceed for each department one-third the entire amount appropriated for the department the previous year, and shall be considered and reckoned as a part of the expenditures of and the money paid therefor as a part of the appropriations for the current financial year,

the words of the second paragraph being those added by the amendment of 1889.

The question which you ask me is one of great importance and has received from me the most careful consideration. The language of the statutes in question and of the other legislation dealing with the city finances (see especially Charter Amendments, St. 1909, ch. 486, sec. 3) is far from clear and it has been the settled practice to treat the city finances, the obligations of the city and the appropriations for carrying on the various departments as if the financial year coincided with the calendar year. The expenses incurred in January of each year have been paid out of whatever moneys were available after the beginning of the succeeding fiscal year on the first of February without regard to their relation to the appropriation on which they were theoretically based. Only twelve months' expenses are paid in any one fiscal year, for the January before a fiscal year begins is paid in that fiscal year and the January at the end of a fiscal year is carried over to the next fiscal year. Thus the bills of January, 1920, were

paid in the fiscal year beginning February 1, 1920, and the bills incurred in January, 1921, were paid in the fiscal year beginning February 1, 1921. I have not attempted to ascertain how this practice originated, but it has existed without a break for the last twenty years, and during that time has been acquiesced in by every successive administration and by all branches of the city government.

In my judgment, however, the statutes do not warrant the established practice. The purpose of the city charter and the amendments thereto, in connection with which the acts referred to must be read, is to limit the expenditure of the municipal officials of Boston to such amounts as have been appropriated by the Mayor and the City Council and to make it possible to know in each year for what the money raised by taxation has been spent, what are the amounts of such expenditures and what is the financial situation of the city. These purposes are to a great extent nullified if a construction be adopted which allows expenditures substantially in excess of an annual appropriation to be carried forward and paid out of the available funds in the succeeding fiscal year, even if no balance of the appropriation remains for that purpose. It is manifest that this would allow, by the simple process of holding back bills, the creation at the end of a fiscal year of a large apparent balance of free cash which had no real existence. It would allow an outgoing administration, which might be corrupt or extravagant, to cripple an incoming administration by the creation of obligations, to meet which the outgoing administration left no available funds. It would make it substantially impossible at any given moment for anyone to tell by the city's books and appropriations just what was its financial condition. It cannot be supposed that the Legislature intended any such results, and in spite of the clumsy wording of the amendment of 1889 its purpose is plainly apparent. That purpose was to allow the various

departments, at the beginning of the financial year, to carry on the work which they were authorized to do during the interval that must necessarily elapse before appropriations could be made. It must be read as authorizing only the payment of liabilities created after the new financial year has begun. Such is the fair interpretation of its language. The words "Except that at the beginning of each fiscal year . . . until the city government shall otherwise order" limit the time when the granted authority shall be exercised. The words which follow "expenditures may be made, liabilities may be incurred and payments made from the treasury from any funds therein, and the treasurer may borrow money in anticipation of taxes to provide funds" show just what authority is granted. They plainly refer to expenditures, liabilities or payments incurred after the beginning of the financial year. There is nothing in the act expressly referring to liabilities incurred before the financial year and the clause between the commas beginning in the second line "to meet the liabilities of the several departments incurred in the carrying on of the work entrusted to them" is obviously only intended to show the purpose of the expenditures, liabilities and payments authorized, namely, those required to carry on the current work of the departments.

If I am correct in this opinion steps should be taken as promptly as possible to modify the existing practice. It must, however, be recognized that to make a change which will satisfy the law is not a simple matter. The provisions of the charter (1909, ch. 486, sec. 3) allowing the transfers in appropriations, the fact that all moneys remaining from the various appropriations have been considered as becoming part of the general funds of the city at the close of the financial year without regard to the outstanding obligations, and many other effects of the course which has been followed must be carefully considered. A radical change in long established usages,

dealing with matters as complicated as the financial organization of a great city, however proper and advantageous it may be, cannot wisely be made suddenly nor without careful consideration of its practical effects. It is at least possible that some further ordinance and it may be some further statute provisions will be desirable.

Respectfully yours,

ARTHUR D. HILL,
Corporation Counsel.

SECOND COMMUNICATION TO THE MAYOR

*in relation to*THE AUDITING SYSTEM OF THE
CITY OF BOSTON.

BOSTON, December 22, 1921.

HON. ANDREW J. PETERS, *Mayor*.

SIR,— In reply to Your Honor's communication of the 21st instant, the Finance Commission begs to state that the facts on which its last report was made were confirmed by the City Auditor, the accountants employed by the commission, and the Corporation Counsel of the City of Boston.

Your Honor's contention regarding the city's finances will be tested in the remaining weeks of the current financial year.

The Corporation Counsel has ruled that the City Treasurer cannot legally pay any bills that were incurred in the present financial year and charge them to next year's appropriations. If, therefore, from the appropriations made this year there is a sufficient balance to pay all the indebtedness of the city for this financial year Your Honor's contention is correct.

If, on the other hand, the city will not be able to pay all the bills of this financial year with the money appropriated, as the Finance Commission believes and has reported, a serious crisis is imminent and the time should now be used in devising ways and means so that the city employees may receive their salaries for January next, and those holding claims against the city may receive what is due them.

Respectfully submitted,

MICHAEL H. SULLIVAN, *Chairman*,
COURTENAY GUILD,
JOHN F. MOORS,
JAMES M. MORRISON,
J. WALDO POND,
The Finance Commission.

COMMUNICATION TO THE MAYOR
in relation to
 THE PROPOSED INCREASE IN THE NUMBER
 OF DEPUTY SEALERS IN THE WEIGHTS
 AND MEASURES DEPARTMENT.

Boston, December 29, 1921.

HON. ANDREW J. PETERS, *Mayor*:

SIR,— The Finance Commission has made an investigation of the ordinance now pending before you for approval which increases the number of deputy sealers in the Weights and Measures Department from twelve to thirteen.

The commission has found that there is no need for the additional position. There has been a vacancy in the position of deputy sealer in the department for fully two years and the department has not found it necessary to fill it.

The department has not made a request for the increase in the number of positions of deputy sealers.

The Finance Commission therefore recommends that Your Honor veto the ordinance.

Respectfully submitted,

THE FINANCE COMMISSION,
 by MICHAEL H. SULLIVAN,
Chairman.

COMMUNICATION TO THE GENERAL COURT
in relation to
 THE PRESENT ACCOUNTING SYSTEM
 OF THE CITY OF BOSTON.

Boston, January 31, 1922.

*To the Honorable the Senate and House of Representatives
 in General Court Assembled:*

During the year 1921 the Boston Finance Commission made a study of the accounting system in use by the City of Boston and submits the following report:

Prior to 1892 the fiscal year of the City of Boston began on May 1 and the municipal year began on the first Monday of January. In 1889 an effort was made to have the fiscal year and the municipal year coincide. This could be accomplished by city ordinance, but before the adoption of such an ordinance it was necessary to secure legislation that would enable the city officials to carry on the business of the city and to provide money to pay current expenses during the period from the first day of the fiscal year until the appropriations could be made.

Ch. 320 of the Acts of 1889 was enacted to provide this power and is as follows:

SECTION 1. Section six of chapter two hundred and sixty-six of the acts of the year eighteen hundred and eighty-five is hereby amended by adding thereto the following:— Except that at the beginning of the financial year, to meet the liabilities of the several departments incurred in the carrying on of the work entrusted to them, until the city government shall otherwise order, expenditures may be made, liabilities may be incurred and payments made from the treasury from any funds therein, and the treasurer may borrow money in anticipation of taxes to provide funds. Such expenditures and liabilities shall

not exceed for each department one-third the entire amount appropriated for the department the previous year, and shall be considered and reckoned as a part of the expenditures of, and the money paid there, for as a part of the appropriations for, the current financial year.

The change of the fiscal year by ordinance, however, did not occur until 1892, and even then it was not changed to coincide with the municipal year. The ordinance provided that the fiscal year should begin on February 1, instead of May 1. The municipal year continued to begin on the first Monday in January, until 1909, when it was changed by statute to begin on the first Monday of February.

The accounting system in use in the City of Boston from its incorporation as a city has been based on receipts and expenditures only — a cash book system. No account is taken of income until actually received, nor of expenses incurred until they are actually paid. When the financial year closes all bills incurred in that year and not paid are disregarded as expenses of that year. They are merged with and considered as a part of the expenses of the following year. It is obvious that under such a system it is impossible to apply the expenses of a given year to the appropriations of that year, or to determine whether department heads have exceeded their appropriations.

In practice all payments made by the city for a month are charged to what is called a general draft of the City Auditor, designated as of the first day of the month following its filing with the treasurer, as for example, "March 1 draft," "April 1 draft," and so on. In these drafts are listed all the payments of the previous month.

When the fiscal year began May 1 and ended the following April 30 there were twelve of these drafts for each year, one for the first day of each month. In 1892 when the fiscal year was changed to begin February 1, there was added an extra draft, called the "January 31 draft." This draft became the twelfth and last one of

the year and should contain a list of all city obligations presented, approved and paid.

After the introduction of this "January 31 draft" there could be no further necessity for a draft the very next day, namely, the "February 1 draft." But the "February 1 draft" was continued, and it now appears that the entire amount of the "February 1 draft" in each year, beginning with February 1, 1893, has been charged to the appropriations of the new fiscal year, although made up entirely of bills contracted in and belonging to the fiscal year that closed the day before. The "February 1 draft," therefore, has been the vehicle by which the indebtedness of one fiscal year has been carried over into the next fiscal year for payment.

This merging of fiscal years has made it impossible to know from the auditor's accounts what part of the appropriations of any fiscal year was applied to the payment of obligations contracted during the previous fiscal year, or what payments covered the obligations contracted during a current fiscal year, or the amount of expenditures contracted during a current fiscal year but left unpaid at the close of that fiscal year.

The result now is a debt of between \$3,000,000 and \$4,000,000 in excess of appropriations available. Even the exact amount of this debt cannot be determined at present.

The Finance Commission procured an opinion from the Corporation Counsel on the legality of charging the February 1 draft to the new fiscal year. This opinion states very clearly that the funds made available to carry on the city's business in the new fiscal year until the appropriations are made, under ch. 320 of the Acts of 1889, cannot be legally used to pay debts brought over from a prior year. A copy of this opinion is annexed to this report.*

This opinion of the Corporation Counsel may not be followed by the city departments to which it applies because they or any of them did not request it. It may

* See page 192.

also be that a future Corporation Counsel may not agree with the opinion of the present Corporation Counsel. The Finance Commission, therefore, has filed a bill, House No. 55, to amend ch. 320 of 1889, so as to prohibit expressly the City Treasurer from paying bills brought over from a prior fiscal year with funds made available for current expenses under this statute.

In determining the excess of actual income over estimated income for a fiscal year in the City of Boston and County of Suffolk, the total tax levy for that year is estimated, notwithstanding that the total amount of a tax levy is never received in the year in which it is levied. About 86 per cent of the current tax levy is actually received. The actual income, therefore, applied to the estimated income, item for item, never produces an excess of actual income over estimated income. The method by which the city authorities are able to show an excess of actual income over estimated income is by estimating revenue receipts, other than from taxes, lower than they should be estimated and including as actual income the taxes of prior years collected, although taxes uncollected of prior years are not estimated at all.

A balance of appropriations returned to the city treasury by the departments at the end of the fiscal year leads to the impression that the city has had an economical year's administration.

The auditor's annual report for the last fiscal year shows balances of unexpended appropriations amounting to \$370,808. These balances were mentioned by the Mayor in his address to the City Council on February 7, 1921, as follows:

The city also starts with a surplus of \$3,817,250.61, the largest recorded in the history of the city government. This gratifying result was due to various causes, among them the successful collection of taxes, the balances of appropriations, amounting to \$370,808, returned by the city departments, and the unexpectedly large returns from the income and corporation taxes.

The fact is, however, that at the time the Mayor made the above statement bills and other obligations of the year referred to, amounting to \$1,137,000, had been paid and charged to the present year's appropriations on the "February 1 draft," and a still greater amount of the obligations of the fiscal year then closed — the exact amount is unknown — was later to be charged to or paid from the present year's appropriations.

For many years, with one exception, the city has not had any temporary loan in anticipation of taxes outstanding at the end of the fiscal year, due to the fact that all the taxes of prior years collected are used to pay current expenses. The result is that very little, or none, of these taxes are made available any year to lower the current tax rate. At the close of the present year the uncollected taxes will reach the sum of about \$7,000,000.

There is a bill — House No. 736 — now before the General Court to empower the Mayor and council to borrow, in anticipation of the uncollected taxes of 1921 and years prior thereto, a sufficient sum to pay the indebtedness of the city in excess of the appropriations for 1921, when and as such indebtedness becomes known.

The present accounting system in the City of Boston does not record uncollected revenue or preserve the identity of the annual tax overlay. The overlay is merged with the general receipts of the city. Whether any of it that has not been applied to abatements has been used for any other purpose is not shown by the auditor's books, although it could well be applied to a variety of purposes that would not appear in the auditor's reports.

The charter provides that the City Auditor shall determine the method of accounting to be used by the city. The Finance Commission believes that the city charter should determine the system of accounting to be used in the city.

There is now pending before the General Court a bill — House No. 944 — which the Finance Commission ap-

proves and desires to see enacted into law. This bill provides that the accounts of the city be rendered on an accrual basis of income and expense, rather than on a receipts and expenditure basis merely, as at the present time.

The present system has tended to demoralize the accounting in every department of the city. The fact that nothing affects the records, except the receipt and payment of money, has led the department heads to rely almost entirely upon the auditor's department for knowledge of their own departments.

This year one department had an appropriation of nearly \$1,000,000, the whole of which was necessary to take care of its obligations of last year, but the Mayor and the City Council did not know this when they made the appropriation. Another department did not come within \$200,000 of its actual expenditures in reporting to the Finance Commission between the issuing of two exhibits of the auditor a month apart.

The Finance Commission at the beginning of the present fiscal year inquired of the different departments as to what bills they had outstanding. Ten weeks elapsed before the last department had replied to that inquiry. None of them replied promptly and most of them were many weeks in furnishing the information. An inquiry of the City Treasurer, made on December 27, 1921, as to how much money he had on hand, from what sources it had been received, and how much of it was unappropriated money, has not been answered as yet. The fact is he cannot answer this inquiry, because his records do not provide the necessary information.

The Finance Commission believes that if the fiscal year is made one in fact instead of one in theory only, as has been the case for so long, with the accounts of the city kept on an accrual basis, with each department operating an independent set of accounts, and with proper control of purchases, the finances of the city will not only be easier to understand, but great economies will result.

In 1916 the segregated budget was established by ordinance in the City of Boston, on the recommendation of a special budget commission appointed by the Mayor to consider the question. The segregated budget requires department heads to state at the beginning of the year the divisions and amounts into which the appropriations requested are to be divided. The Mayor and City Council thereafter appropriate separately the amounts in these divisions. In recommending the adoption of the segregated budget system the special commission discussed the subject of transfers of appropriations from one item to another in the budget and stated: "Attention has been directed to the fact that the City Auditor and the Mayor can, by exercising their charter power of transfer, defeat the proposed or any form of segregated budget."

This warning has not been heeded. The budget has now been in operation six years and through the allowance of transfers has become, except in respect of salary items, of little value. The following tabulation shows the number of transfers made annually from 1916 to 1921, both inclusive:

TRANSFERS WITHIN DEPARTMENTS.

1916-17	1,406
1917-18	3,017
1918-19	5,756
1919-20	1,600
1920-21	2,177
1921-22	1,427

The experience of the past five years has shown that the segregated budget may be made an aid to extravagance, rather than a check upon it, because of the ease with which department heads can obtain transfers from one item to another and even from one department to another. Moreover, transfers easily obtained render unnecessary any thoughtful study by department heads in the preparation of their budgets at the beginning of the year.

In some departments it has become the practice at the end of the year to gather all unexpended items in the budget into one fund — so easy is it to obtain transfers — and to expend this sum for a purpose not mentioned in the segregated budget.

For example, during the last three years one department has purchased one or more automobiles each year after December 1, although these purchases had not been provided for when the budget was made up. This year one department undertook early in the year an expenditure amounting to more than \$5,000, which was purposely not provided for in the budget, and was assured by the Mayor that if there was not money enough in the balances under the different items of the segregated budget of this department at the end of the year he would transfer sufficient funds from some other departments to meet the liability.

There should be few transfers from one item to another of the budget before December 1 of each year, yet these transfers begin as early as May in each year.

The Finance Commission recognizes that transfers may become necessary, both from the Reserve Fund and from item to item within a department, but unless these transfers are scrutinized carefully and department heads are required to show a necessary, urgent and unforeseen reason for each transfer, the segregated budget system as an aid to economy and efficiency not only fails but becomes an inducement to extravagance.

The Finance Commission believes that no city official appointed by the Mayor can maintain an impartial attitude toward requests for transfers of budget items, particularly if the requests are indorsed by the Mayor. The commission further believes that the chief executive of the city, who is responsible under the present charter for the appropriation and expenditure of all moneys, cannot maintain a firm and impartial attitude toward requests for transfers from his own appointees, especially during the last two months of the year.

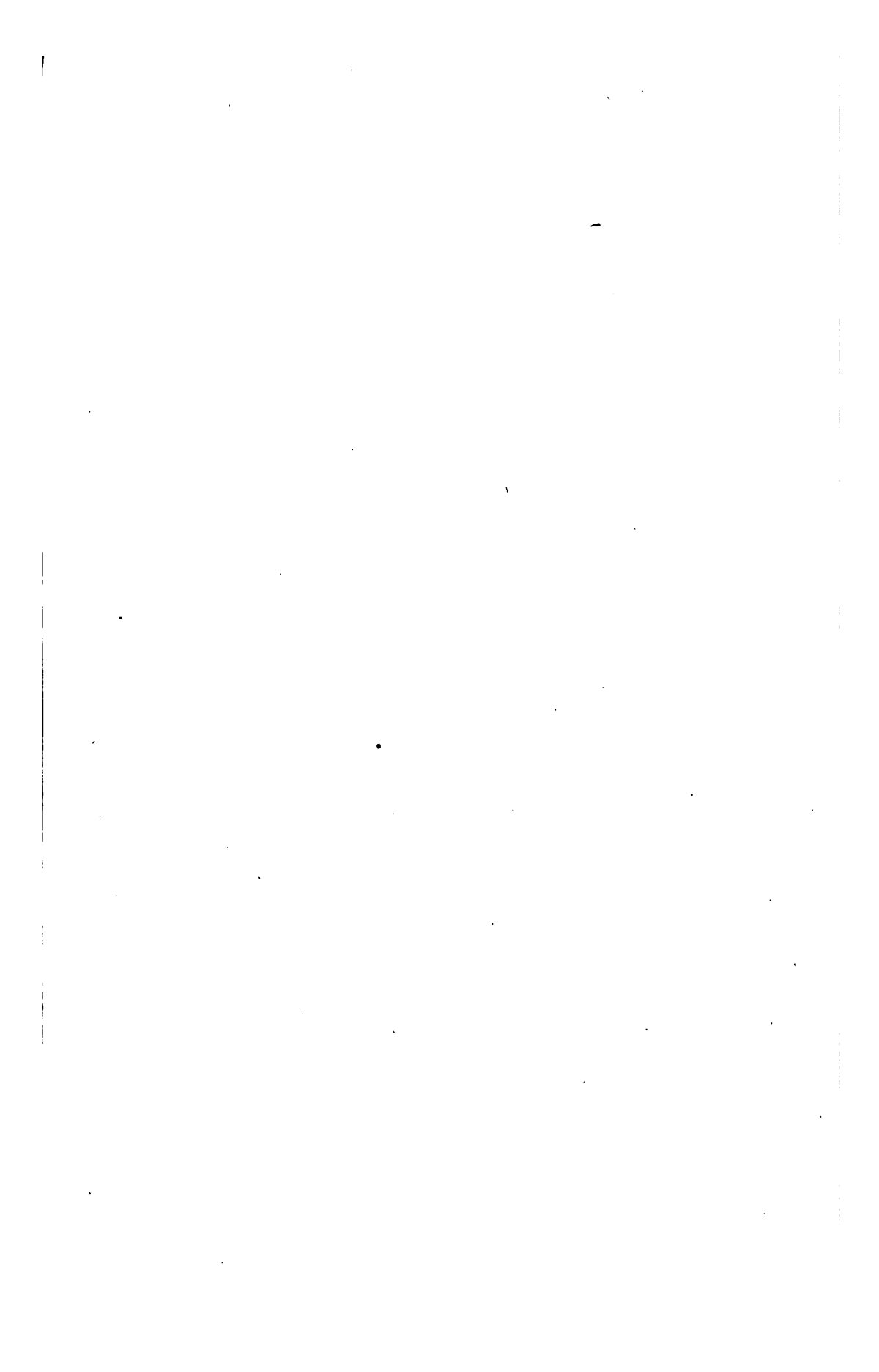
The Finance Commission is authorized to investigate the departments of the city. Since the adoption of the segregated budget it has annually scrutinized with great care the department requests, item by item, and has rendered a written opinion each year to the Mayor upon every item of the segregated budget for each department. These reports have been an effective instrument in the hands of the Mayor with which to reduce unnecessary requests for appropriations by department heads. The data and experience thus annually gained by the commission, taken with its power of investigation, which includes authority to administer oaths and require the attendance of persons and the production of papers, render it peculiarly fitted to pass upon transfers under the segregated budget system.

The Finance Commission has filed a bill — House No. 56 — with the General Court to amend the charter so as to provide that all transfers, except from the Reserve Fund, shall require the approval of the City Auditor, the Finance Commission and the Mayor.

Respectfully submitted, .

MICHAEL H. SULLIVAN, *Chairman*,
JOHN F. MOORS,
J. WALDO POND,
COURTENAY GUILD,
JAMES M. MORRISON,

The Finance Commission.



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